

The crisis before the crisis: pre-pandemic mortality trends in UK cities and countries

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Background



Health

Life expectancy progress in UK 'stops for first time'

By Alex Therrien
Health reporter, BBC News

25 September 2018



Life expectancy in the UK has stopped improving for the first time since 1982, when figures began.

Women's life expectancy from birth remains 82.9 years and for men it is 79.2, the figures from the Office for National Statistics, for 2015-17, show.



Scottish life expectancy improvements stall

14 August 2019



Although the population is aging, life expectancy is no longer showing clear progress

Life expectancy improvements have stalled, according to a report from the National Records of Scotland.

It said the change came after three decades in which Scottish residents have been

Analyses

- Why?
 - To examine recent changing mortality trends at country *and city* level
- Where?
 - Countries: Scotland, England/England & Wales, N. Ireland
 - Cities: Glasgow, Edinburgh, Dundee, Aberdeen; Liverpool, Manchester, Birmingham, Leeds, Sheffield, Bristol; Belfast
- What?
 - European age-standardised mortality rates (EASRs)
 - All-causes deaths
 - 10 specific causes: respiratory disease, IHD, stroke, cancer, lung cancer, suicide, external causes, MVTAs, alcohol-related, drug-related poisonings



Analyses

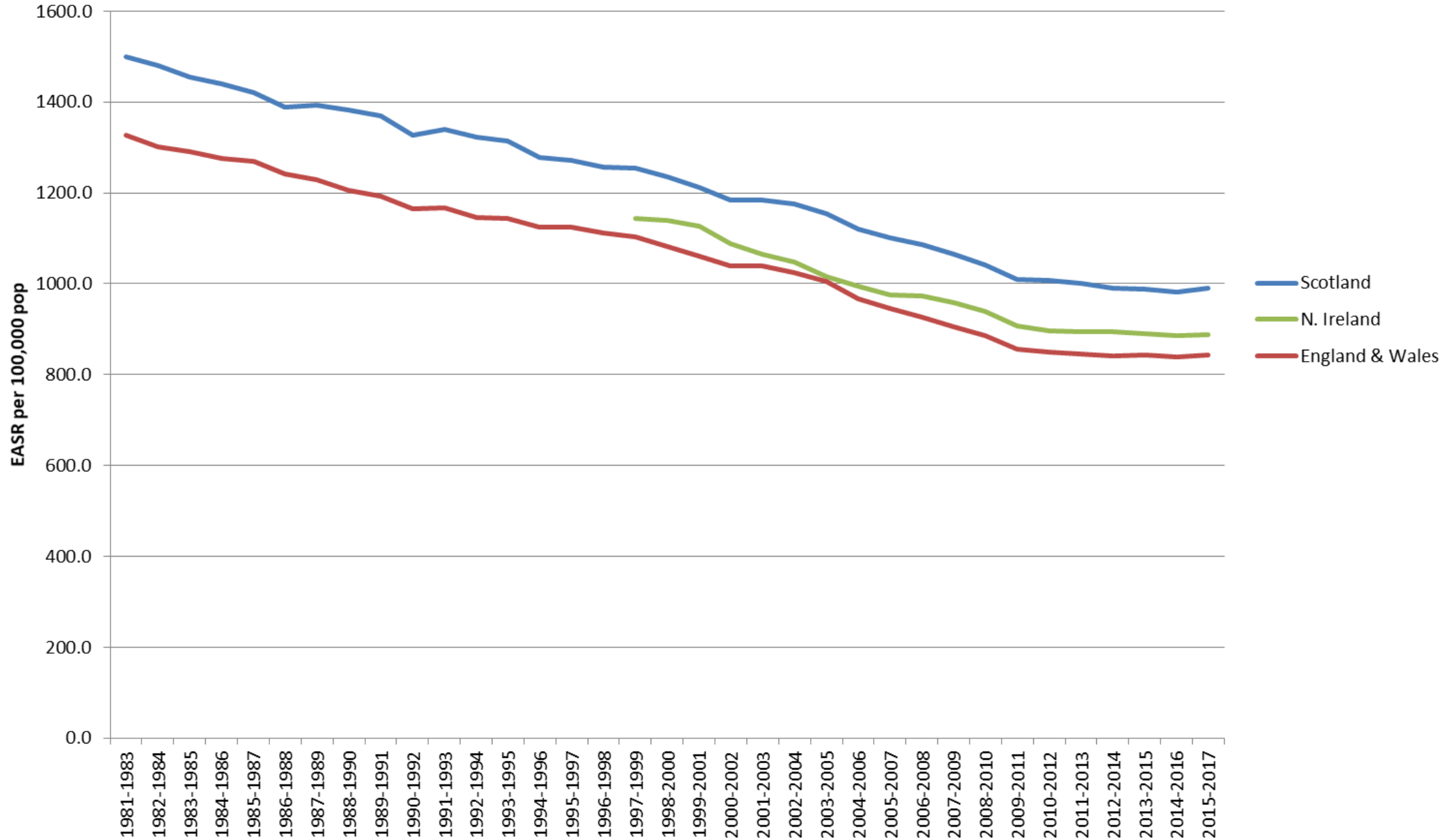
- When?
 - Approximately 1981-2017 (varies a bit)
- Who?
 - By sex
 - By 6 age groups: all ages, 0-14, 0-64, 15-44, 45-64, 65+ years
 - By deprivation 2001-17 using different national indices
 - includes *city-specific* quintiles for Scotland
- Equals?
 - *11 causes x 4 countries x 11 cities x 2 sexes x 6 age groups x 5 deprivation quintiles = c.3000 separate analyses = **death-by-data***
- 10 minute rapid overview of main points to follow...

Results: 1 (of 4)

- Recent changes in mortality rates observed across all UK countries and cities

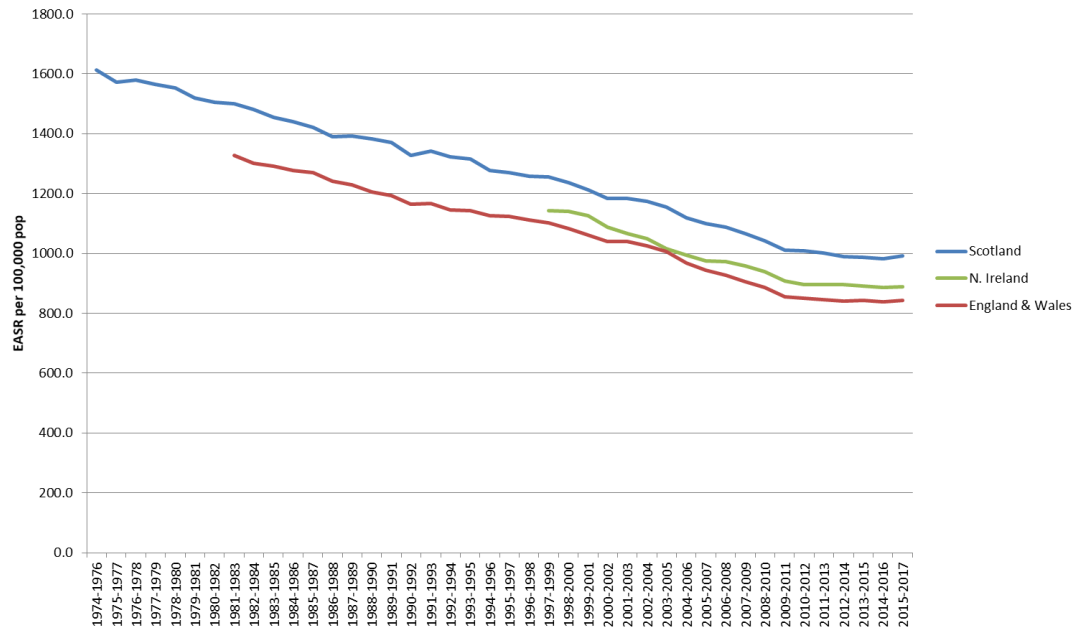
Females, all ages, all cause: European age-standardised mortality rates

Rolling three-year averages per 100,000 population



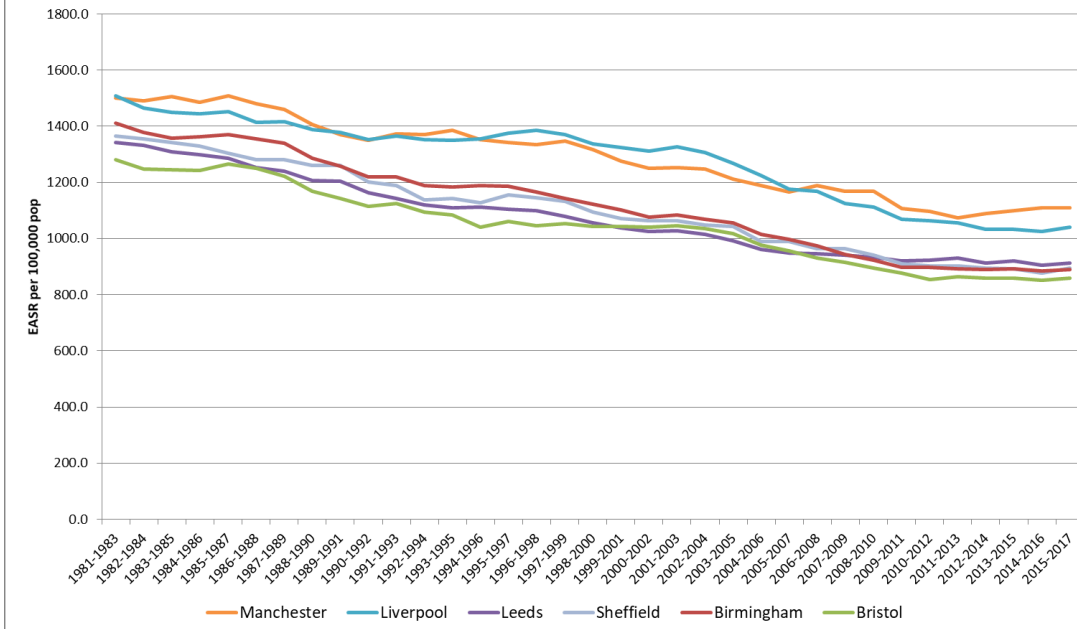
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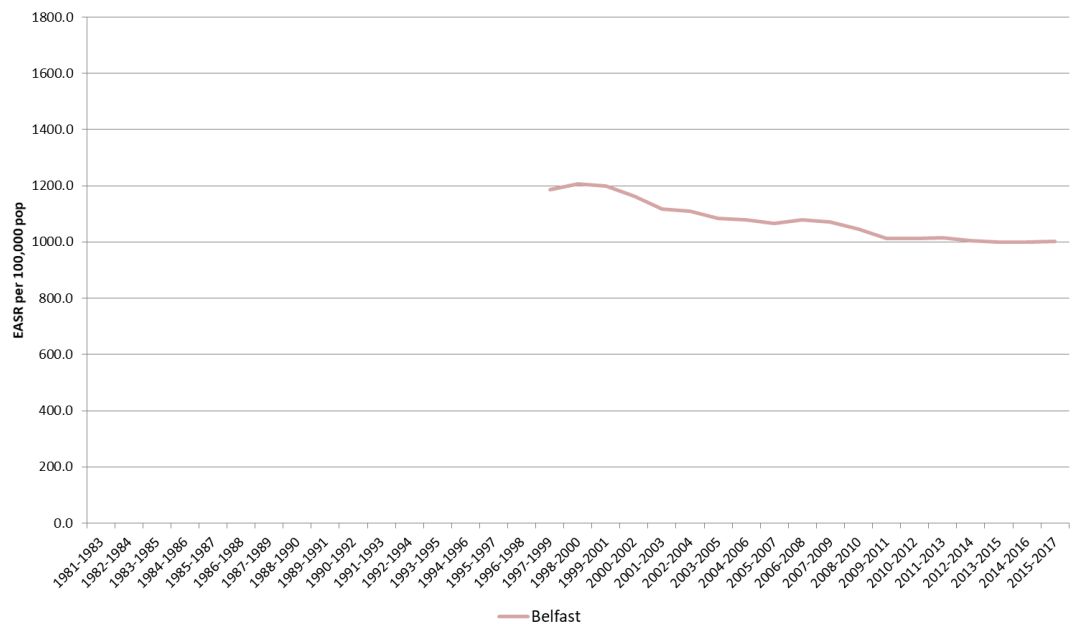
English cities: females, all ages, all cause EASRs

Rolling three-year averages per 100,000 population



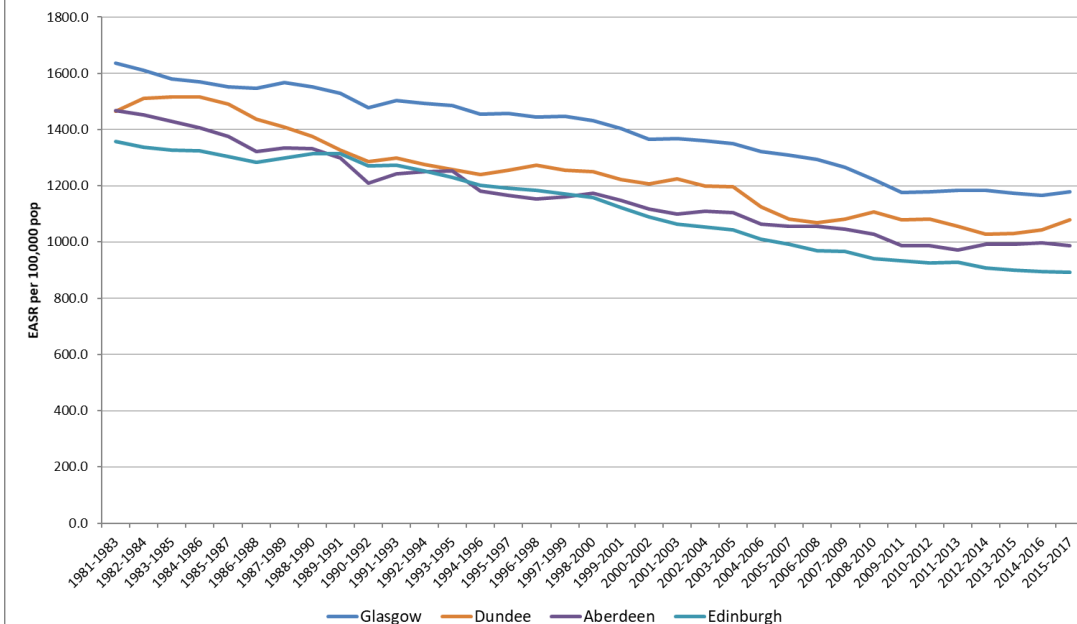
Belfast: females, all ages, all cause EASRs

Rolling three-year averages per 100,000 population



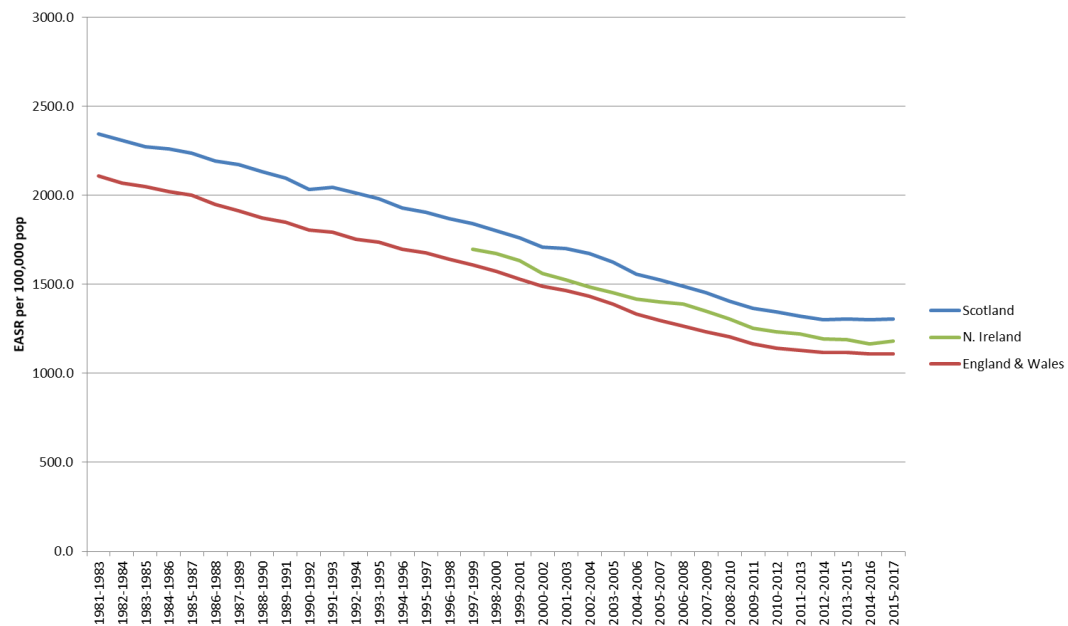
Scottish cities: females, all ages, all cause EASRs

Rolling three-year averages per 100,000 population



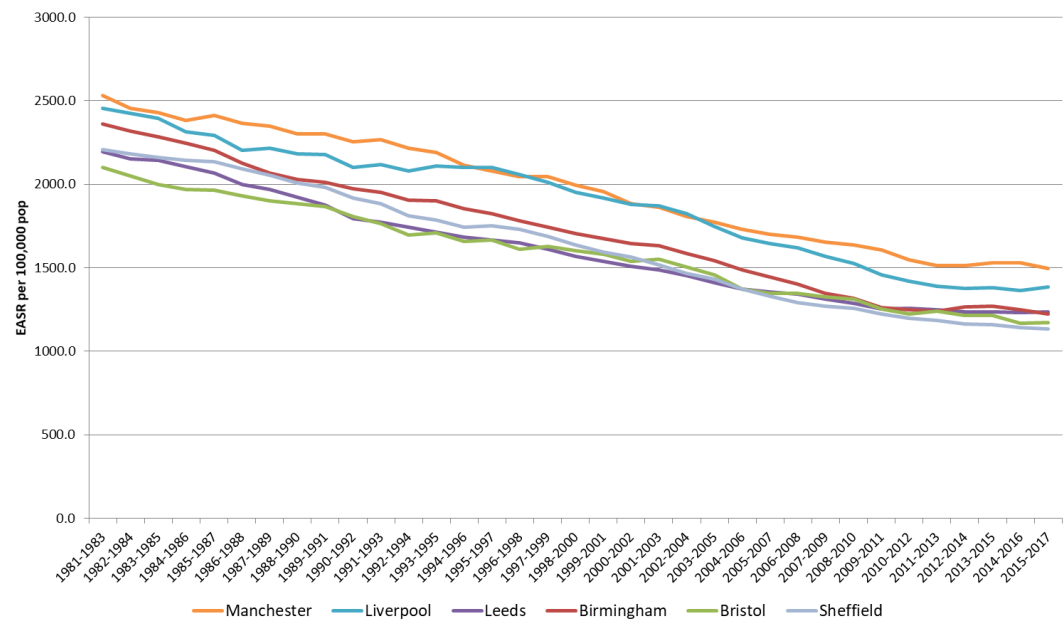
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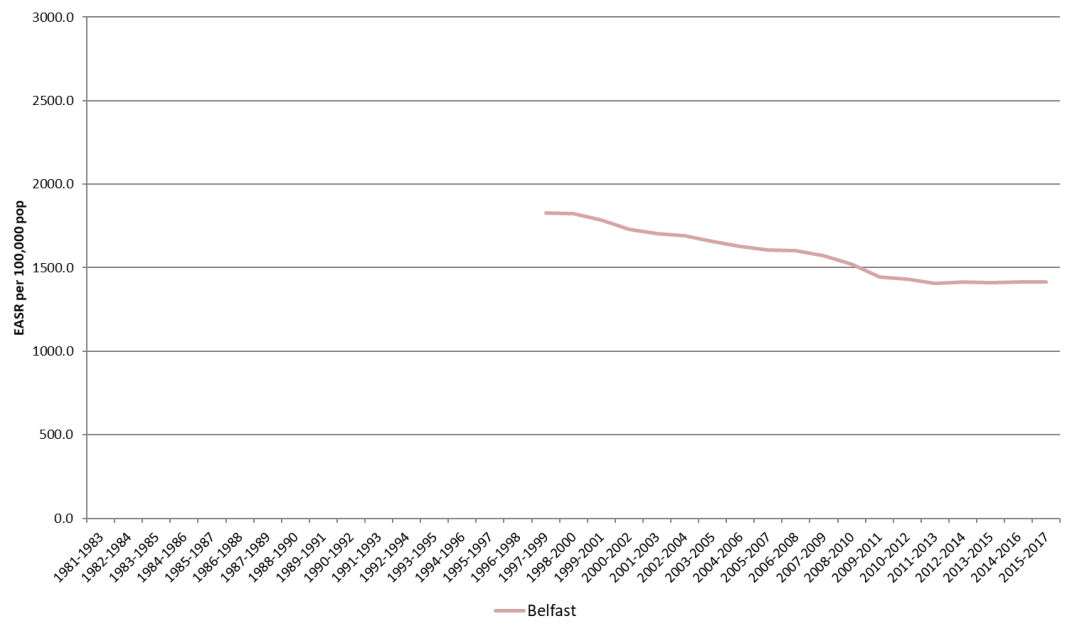
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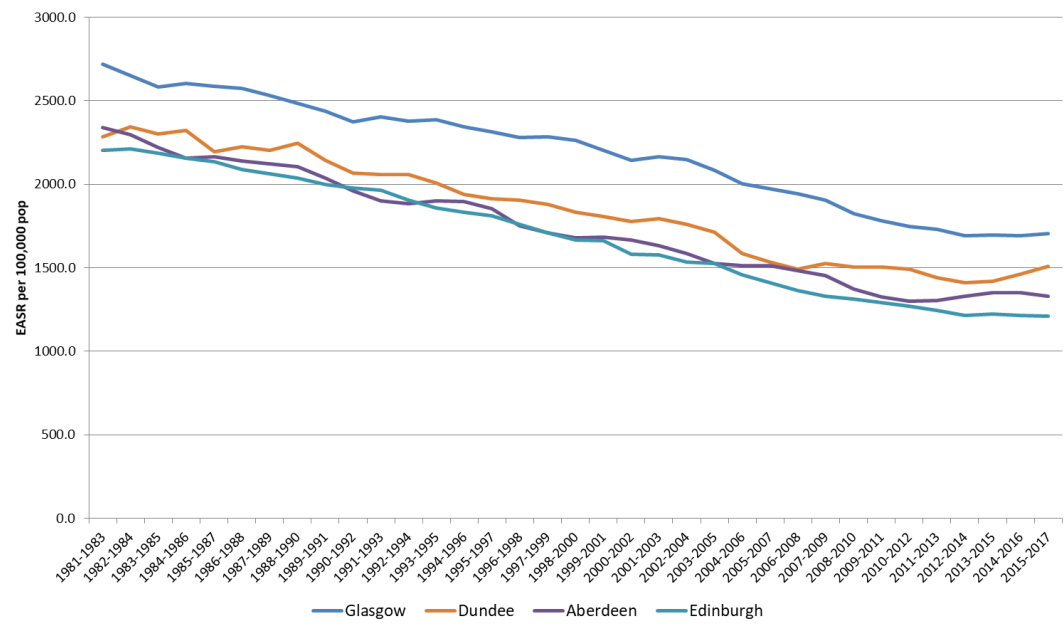
Belfast: males, all ages, all cause EASRs

Rolling three-year averages per 100,000 population



Scottish cities: males, all ages, all cause EASRs

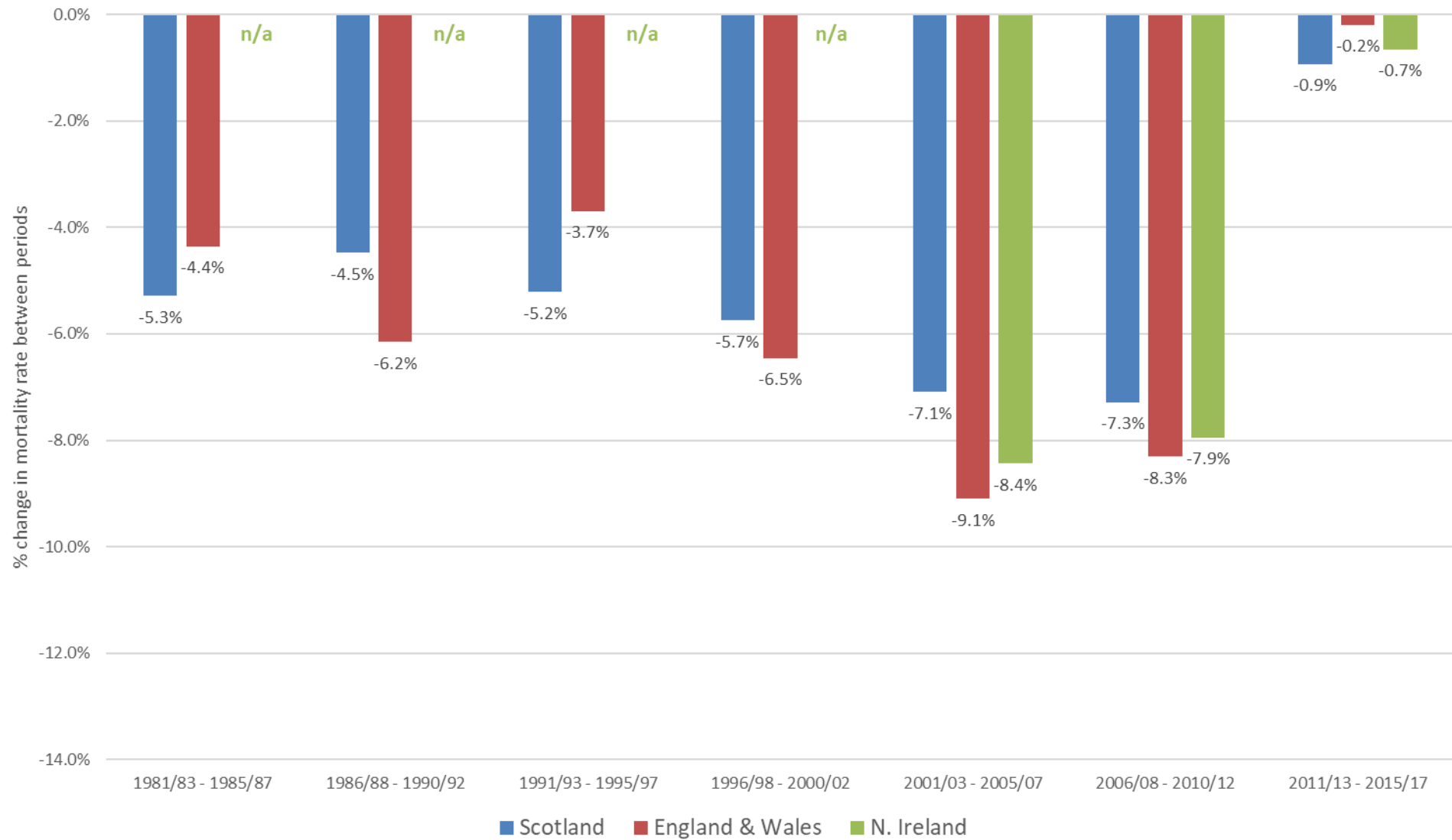
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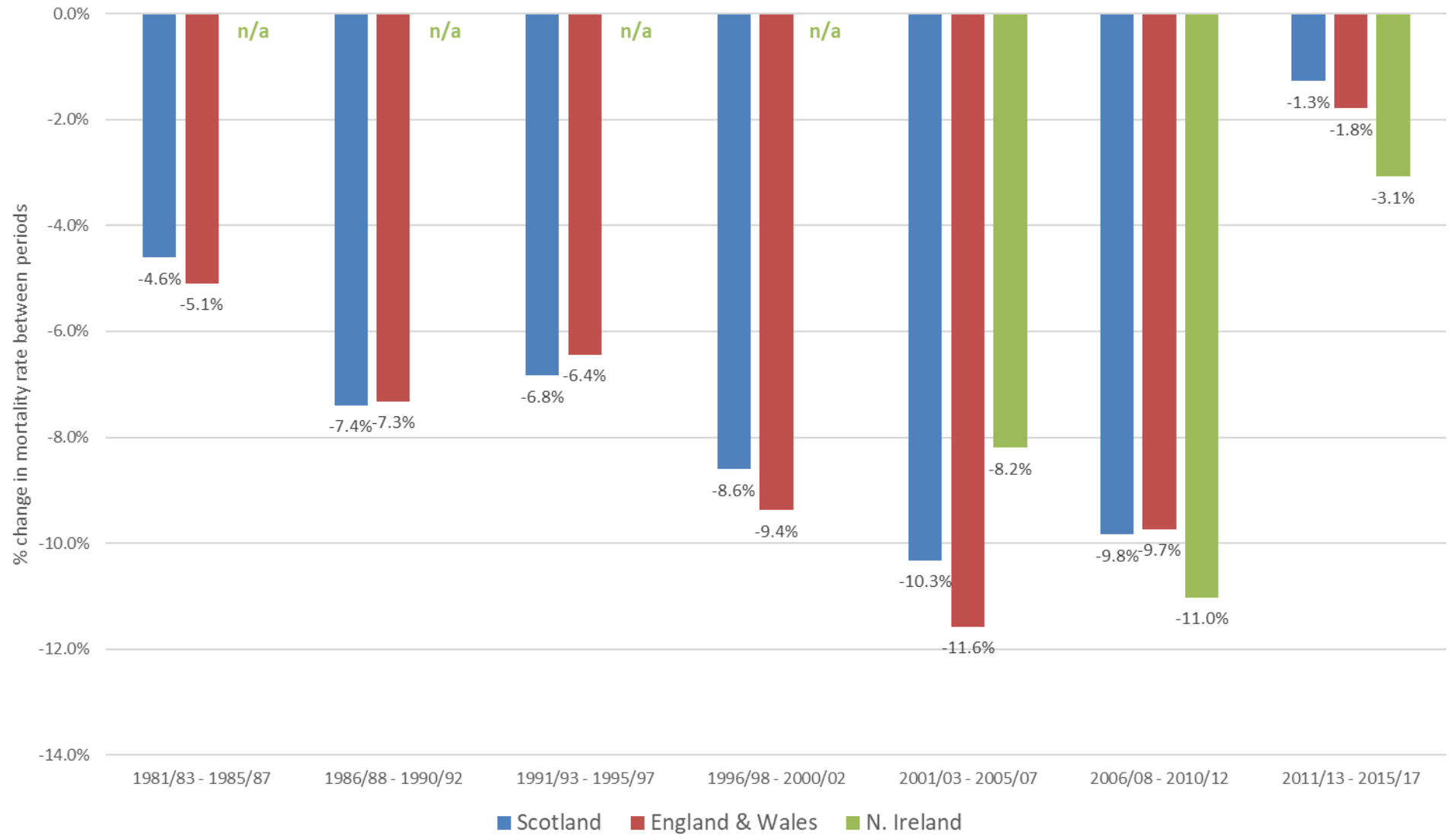
Quantifying change over time

% change in rates between five year periods (all causes,
all ages)

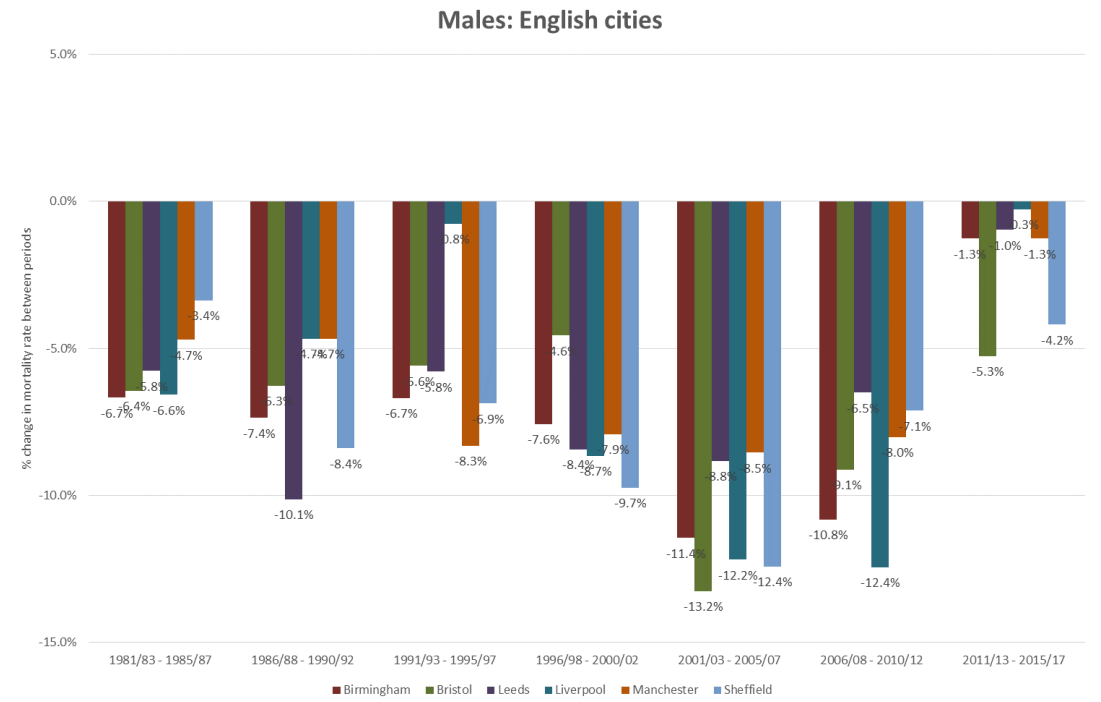
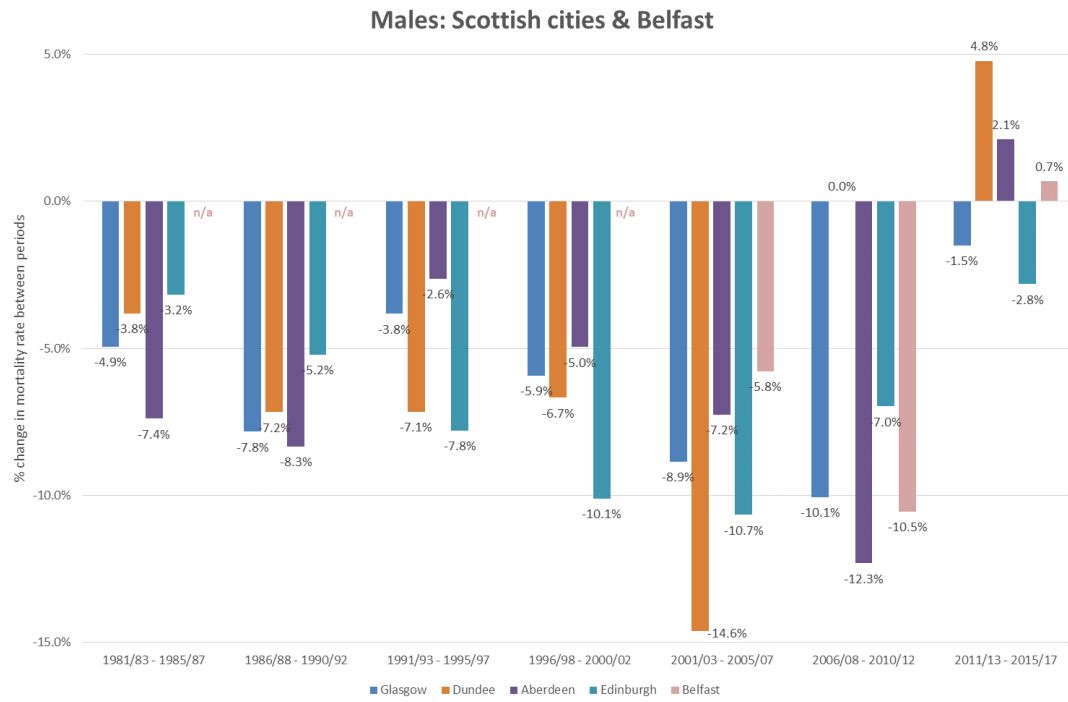
Females, all causes, all ages: percentage change in standardised mortality rates between four year periods



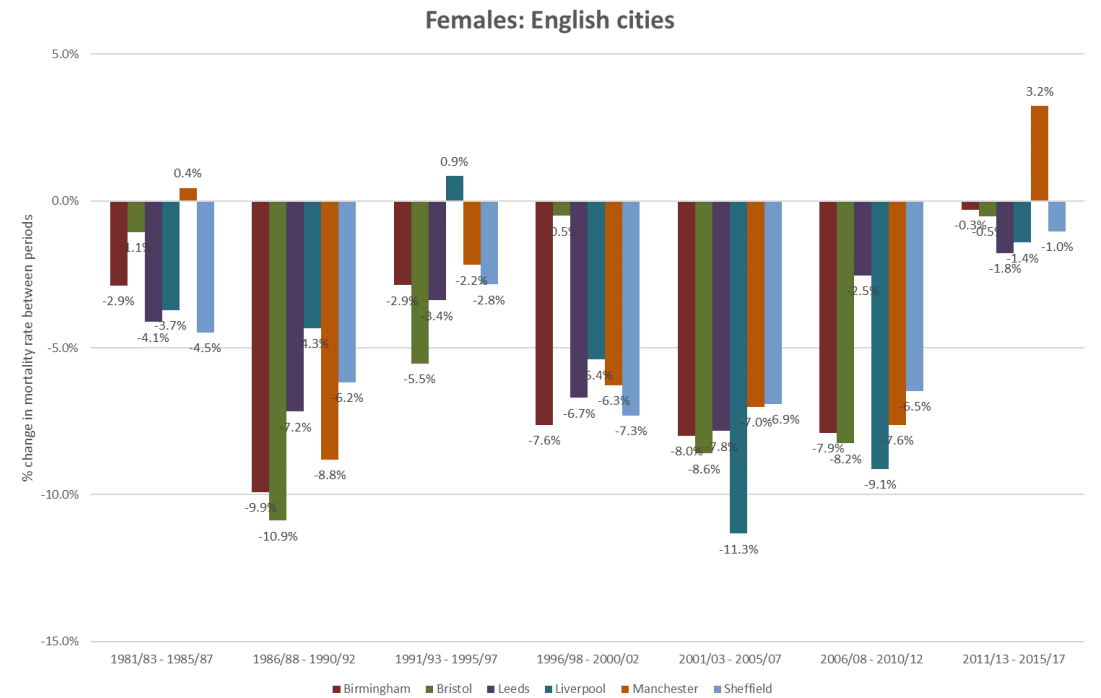
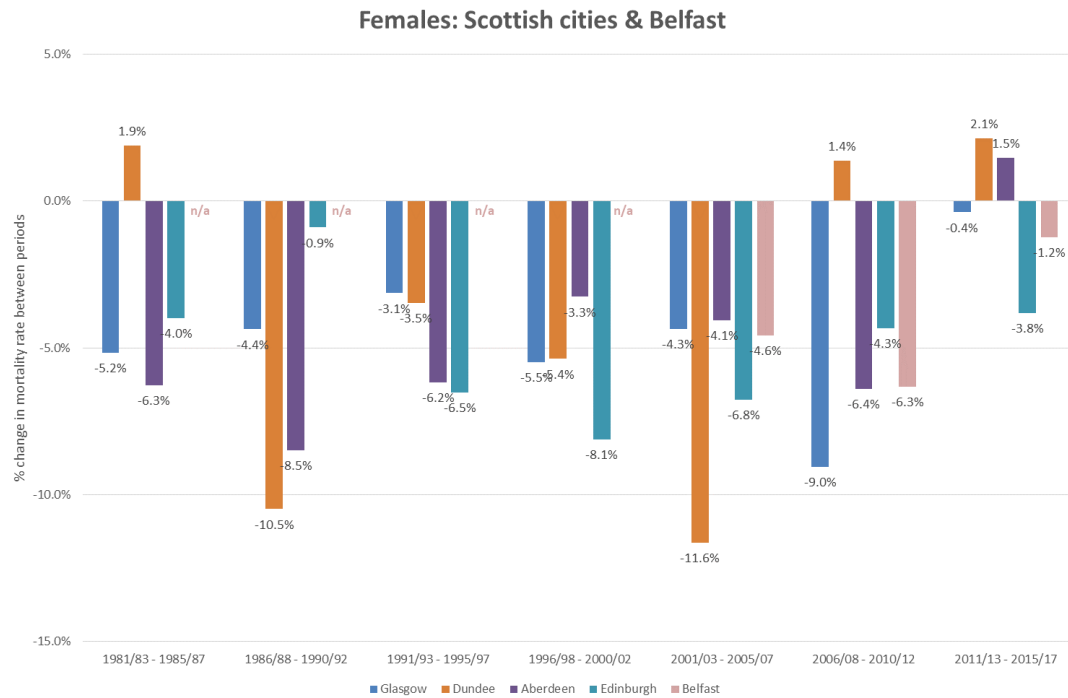
Males, all causes, all ages: percentage change in standardised mortality rates between five year periods



a) Males



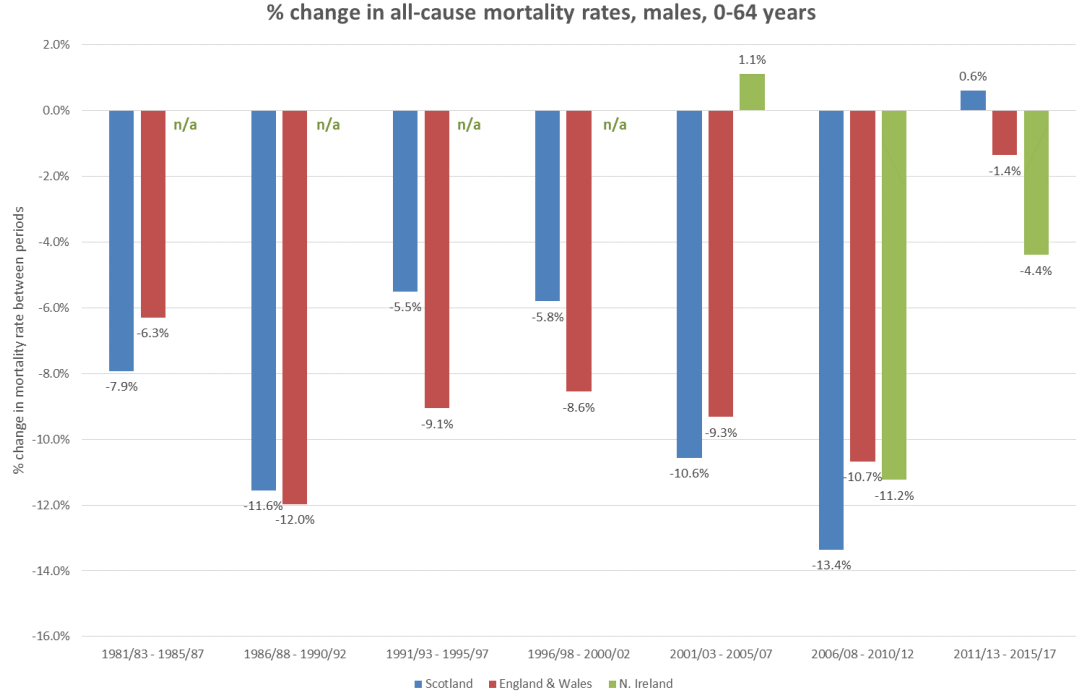
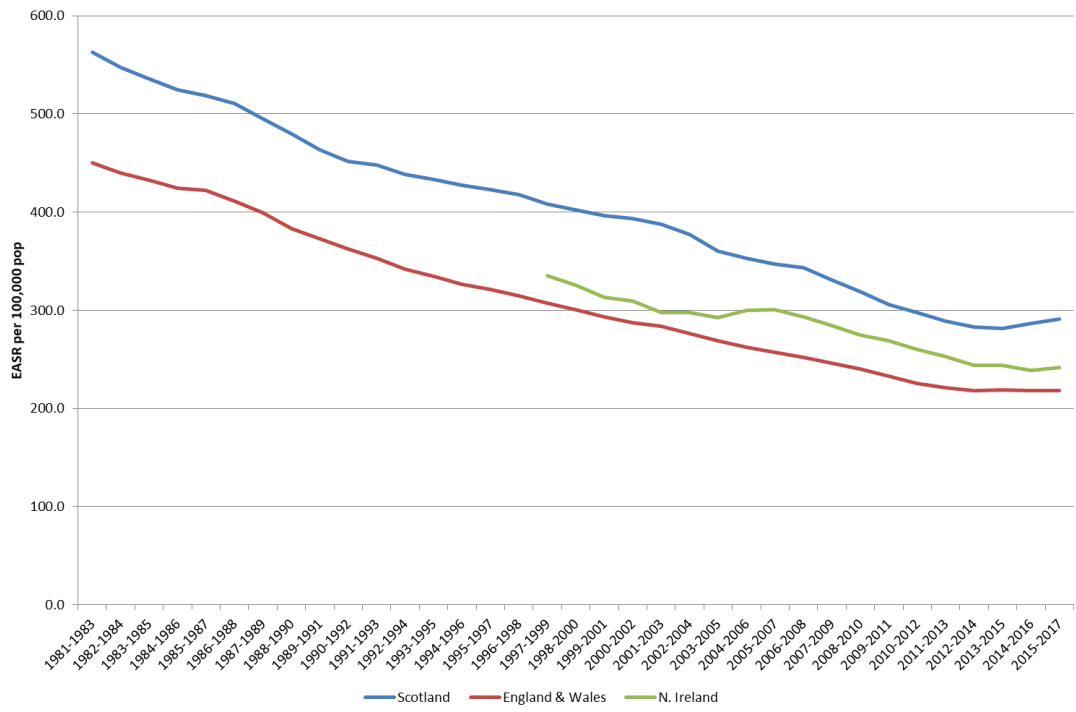
b) Females



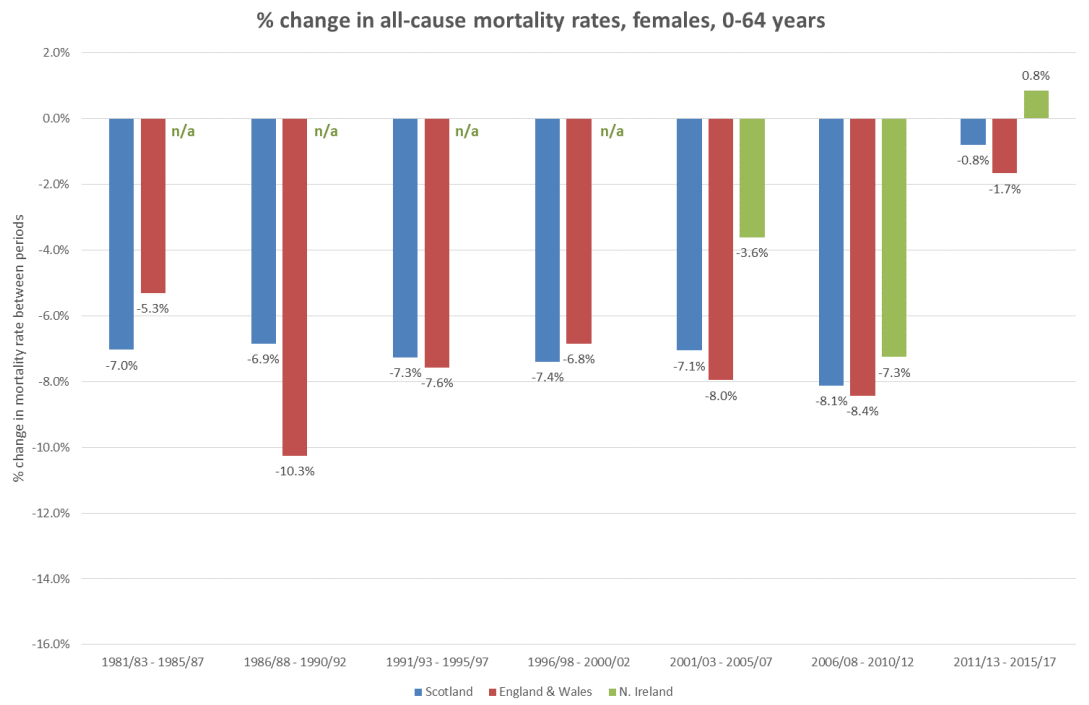
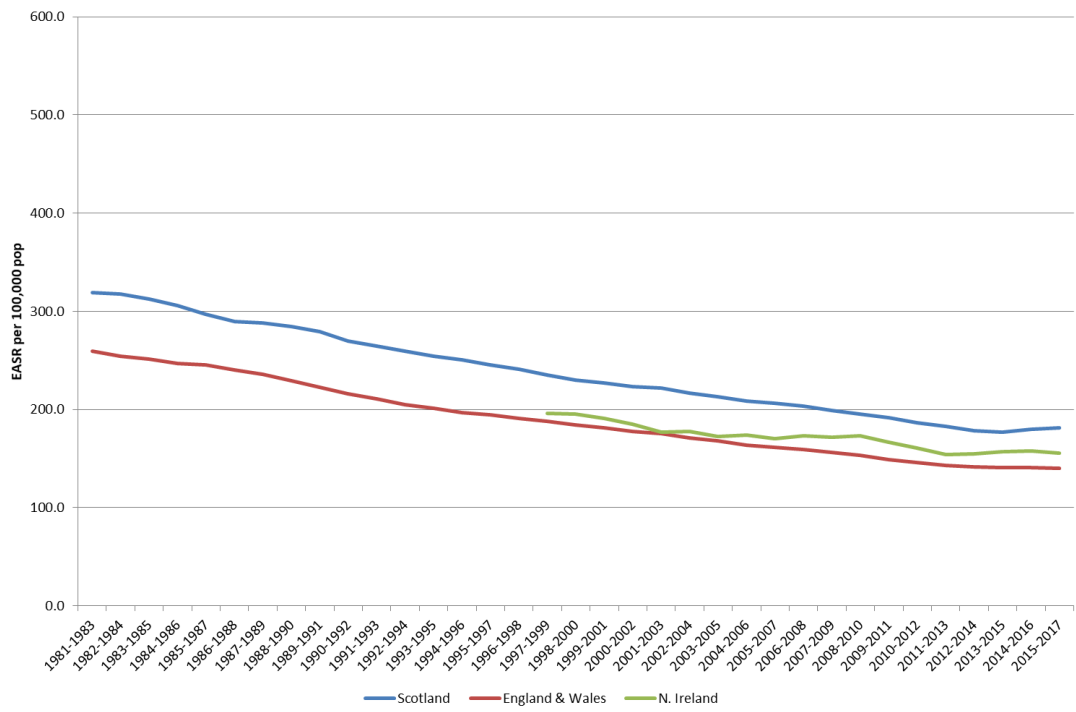
0-64 years

- Similar but...
- Worsening mortality in Scotland cf E&W in most recent period
- Worrying trends in Dundee
- Likely influence of drug-related deaths (more later)

a) Males

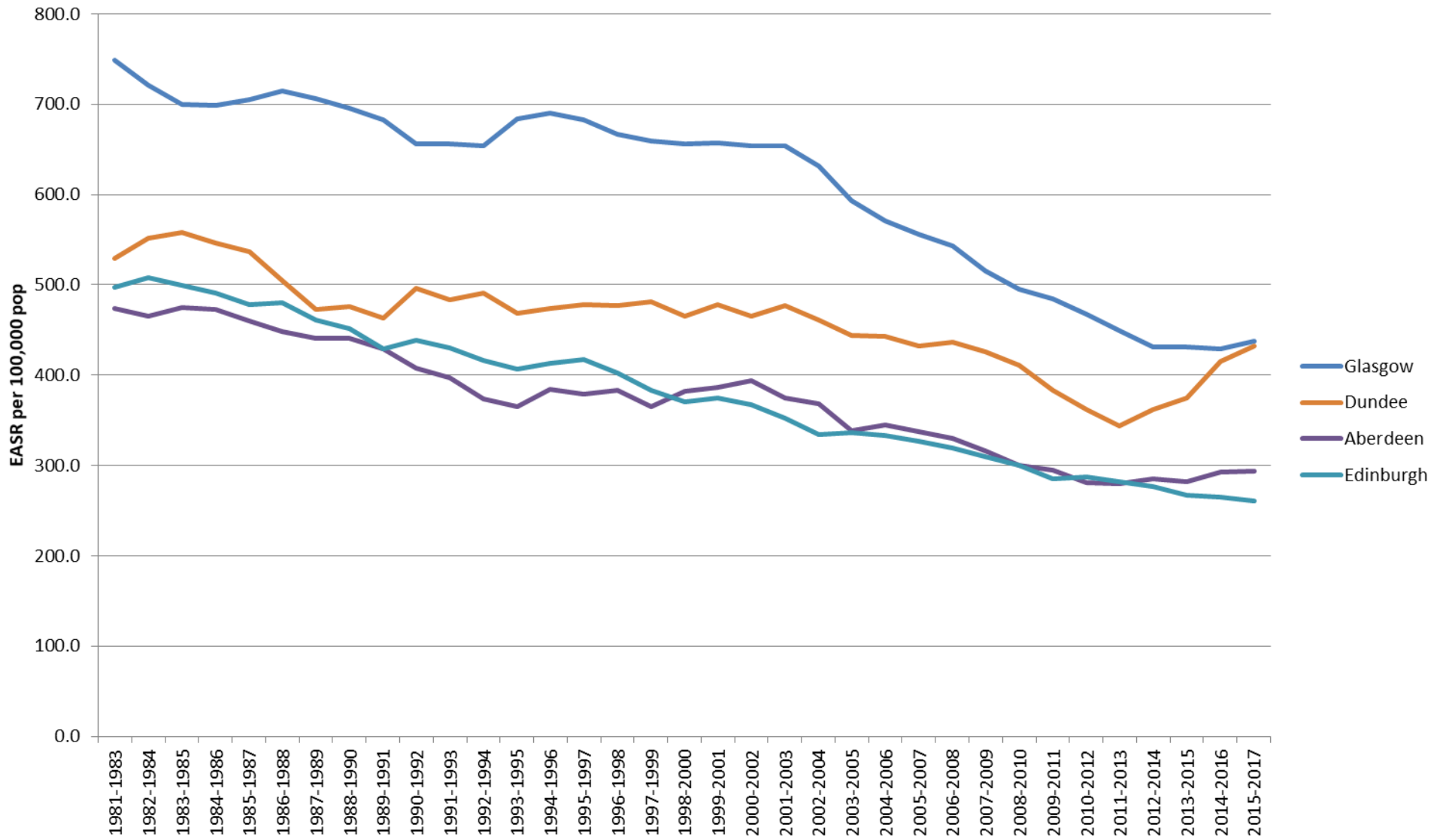


b) Females



Males, 0-64 years, all cause: European age-standardised mortality rates

Rolling three-year averages per 100,000 population

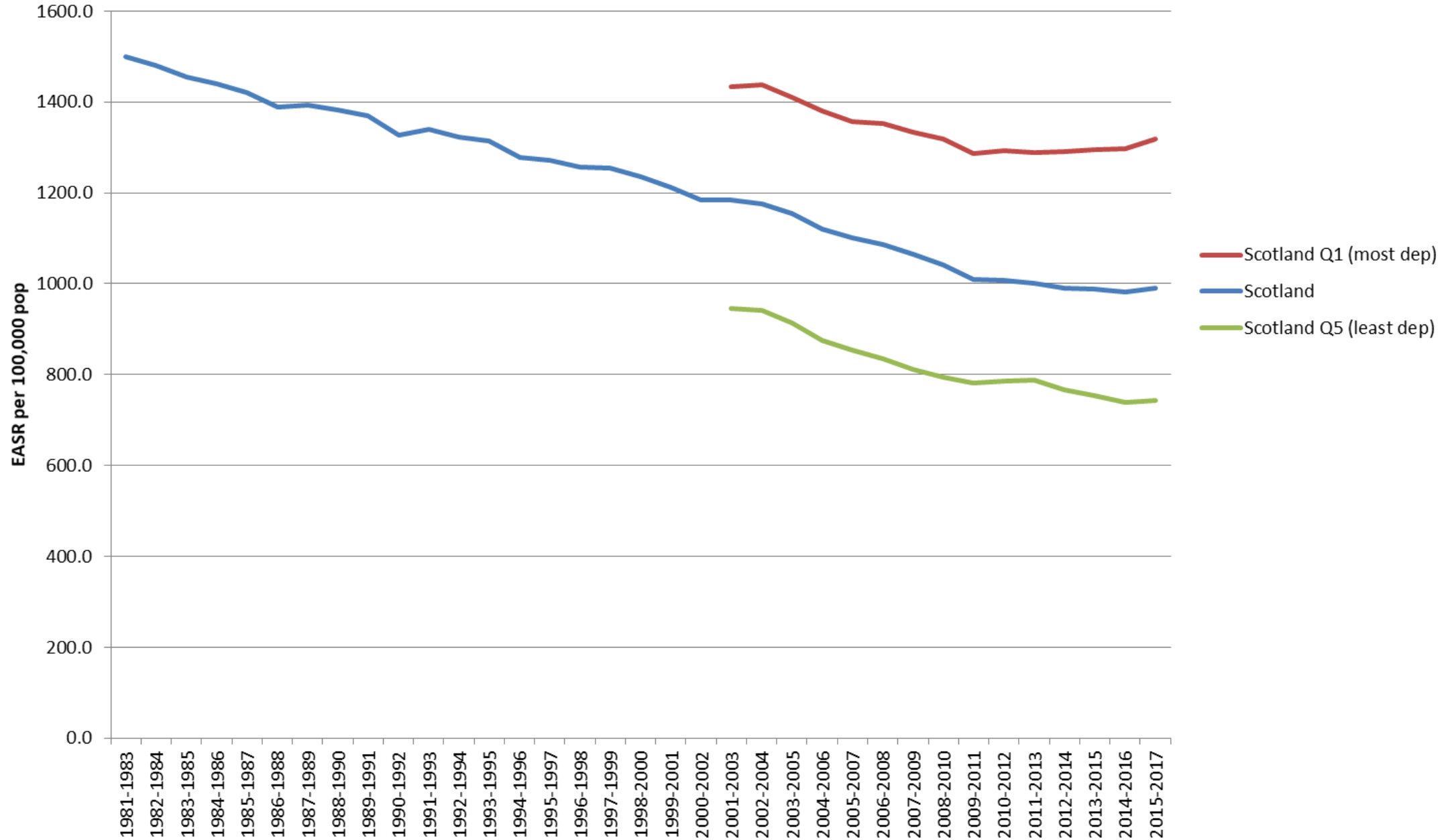


Results: 2 (of 4)

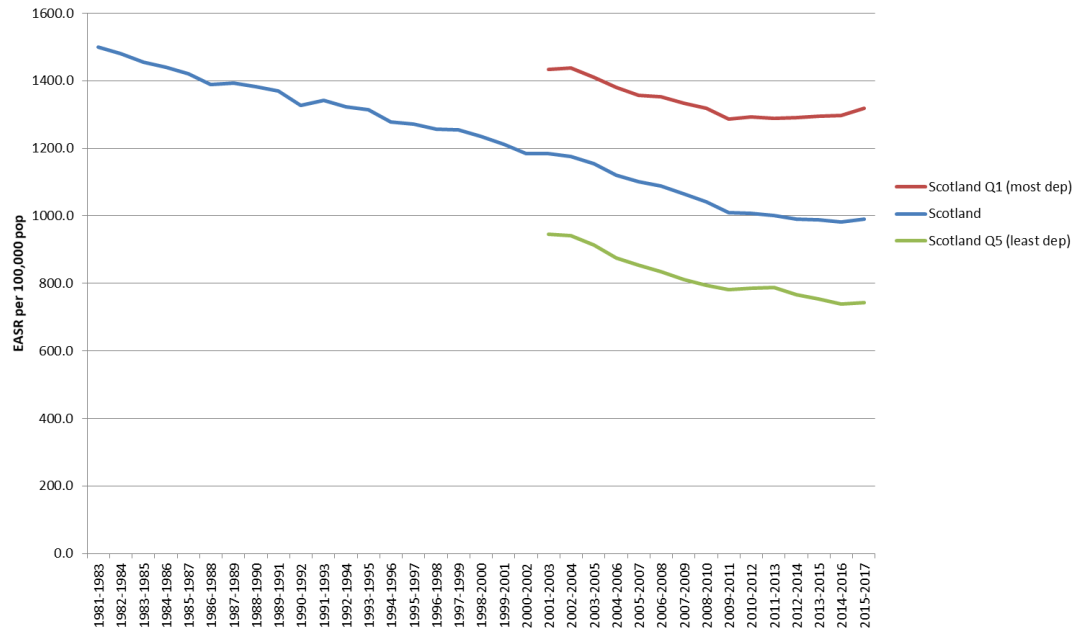
- NB: 'slow down' in mortality improvement masking **increasing** death rates among the poorest

Females, all ages, all cause: European age-standardised mortality rates

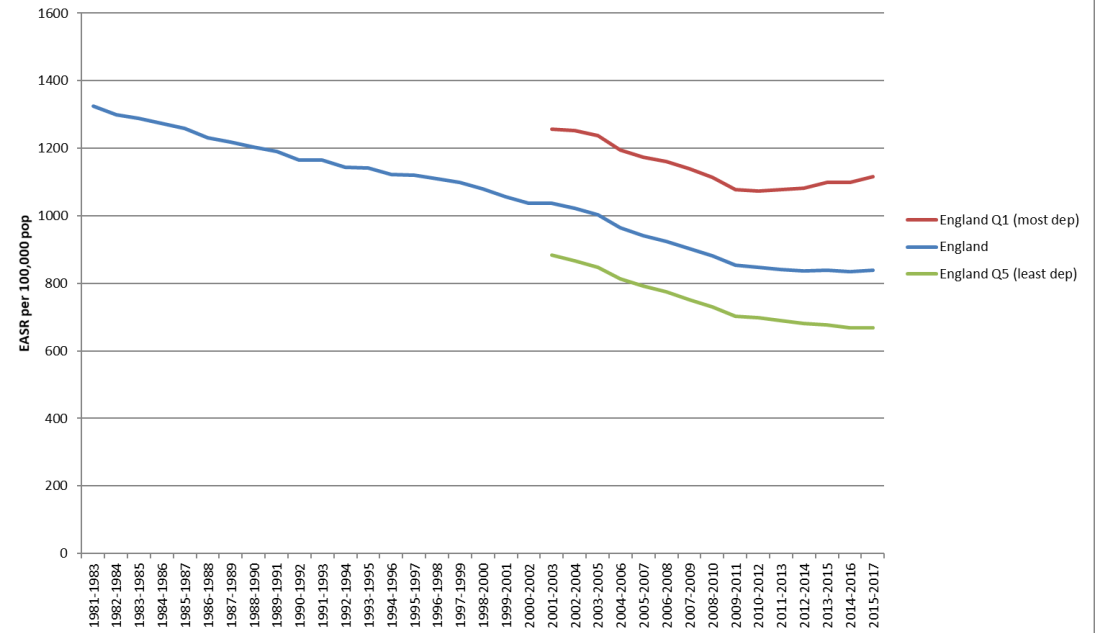
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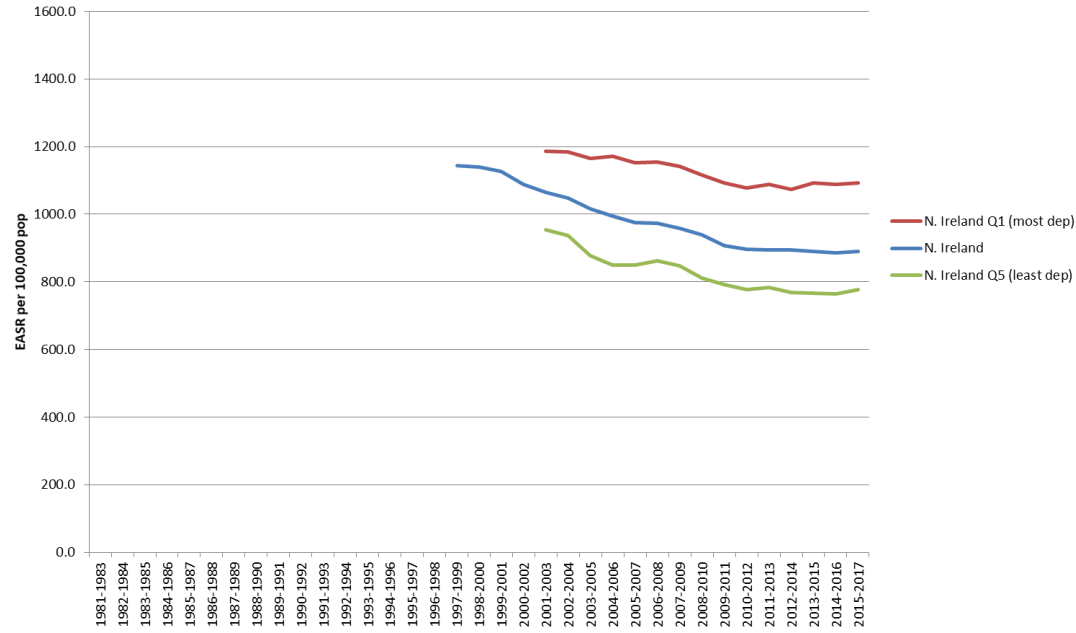
Scotland: females, all ages, all cause EASRs
Rolling three-year averages per 100,000 population



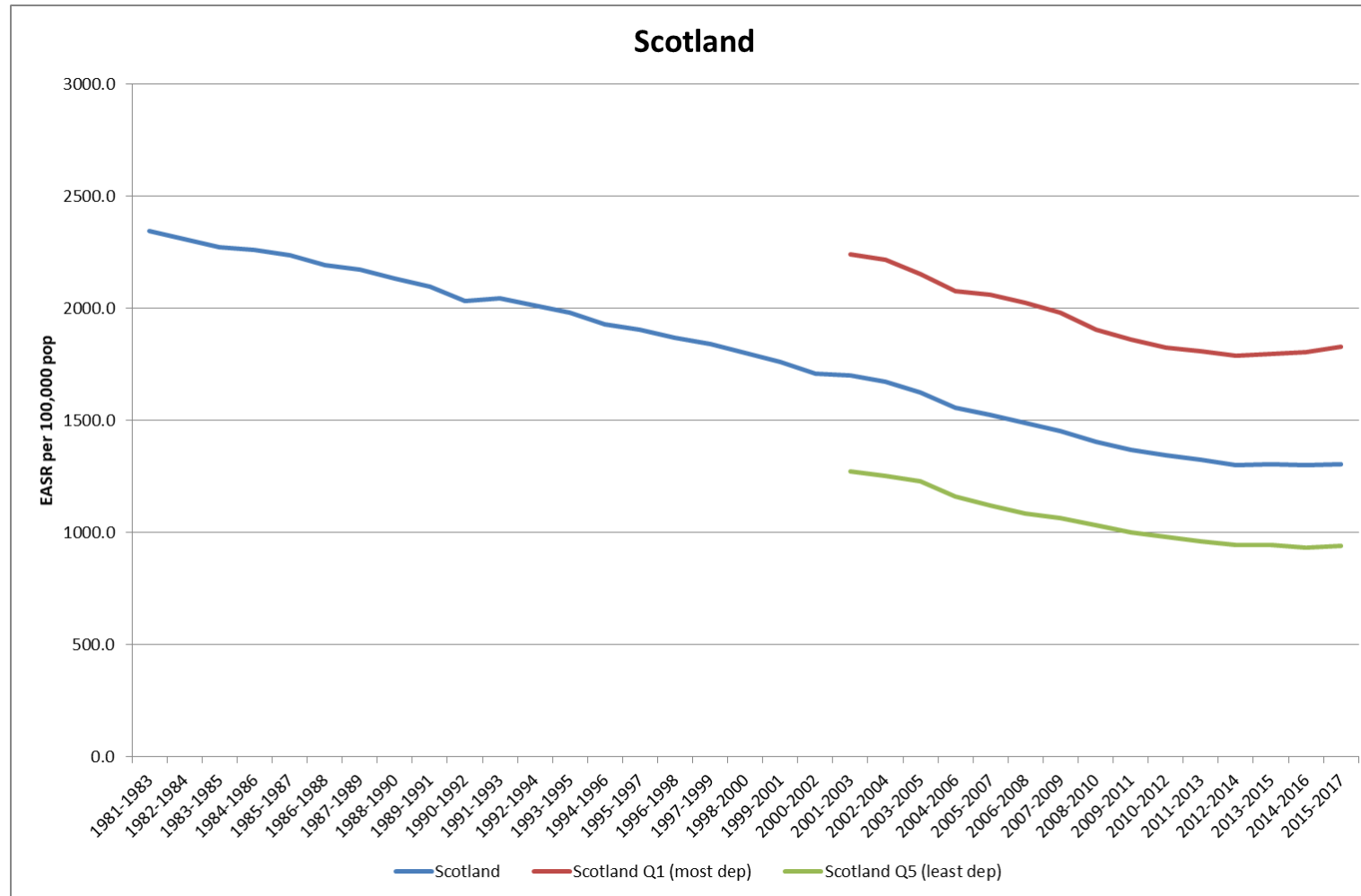
England: females, all ages, all cause EASRs
Rolling three-year averages per 100,000 population



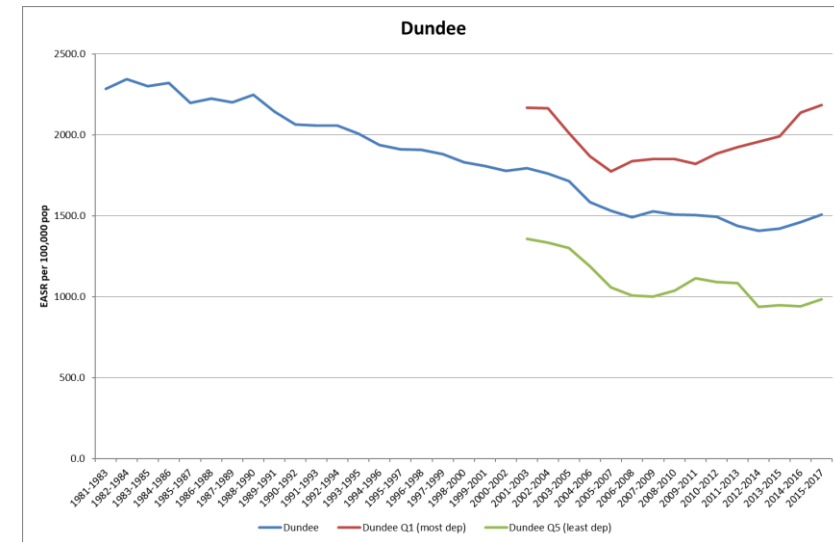
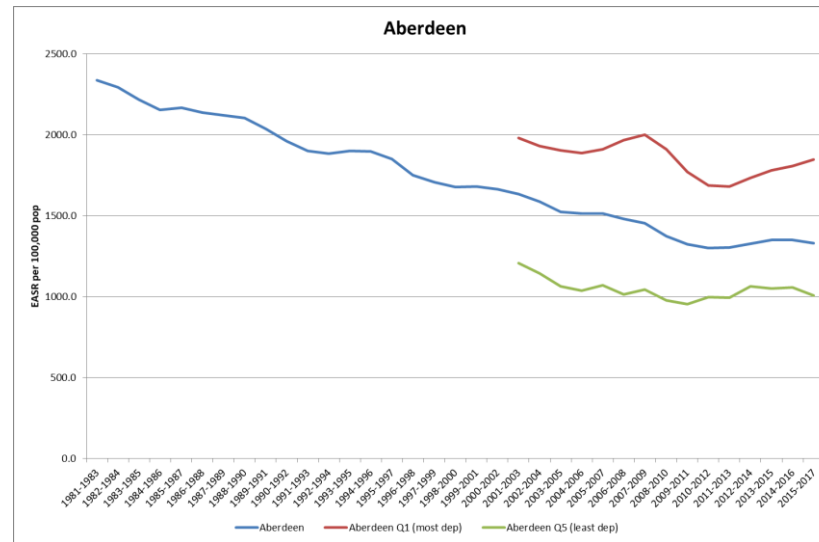
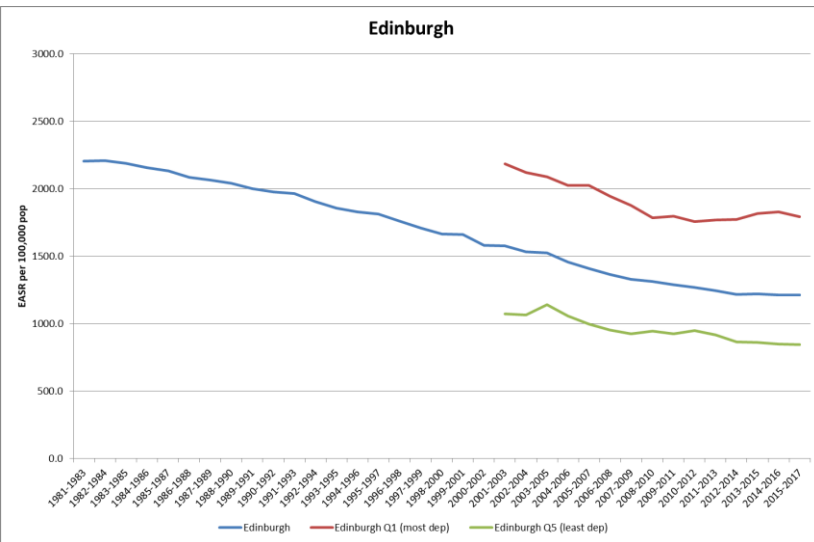
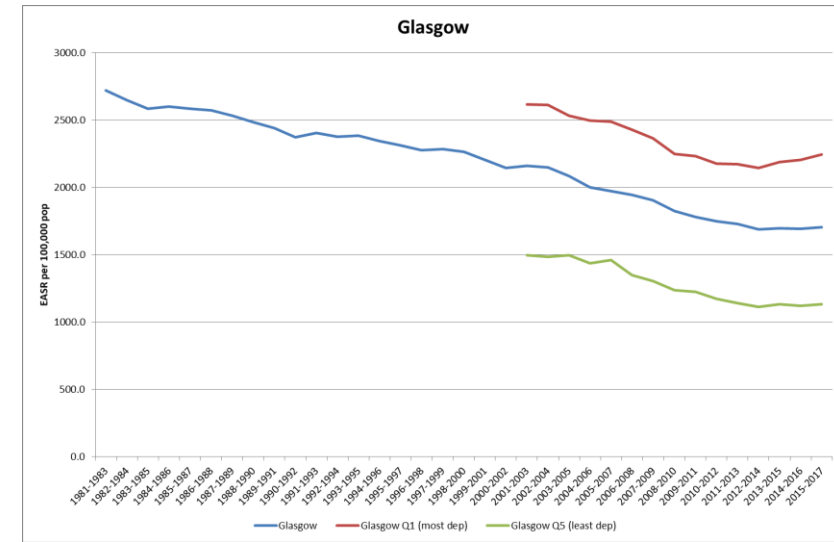
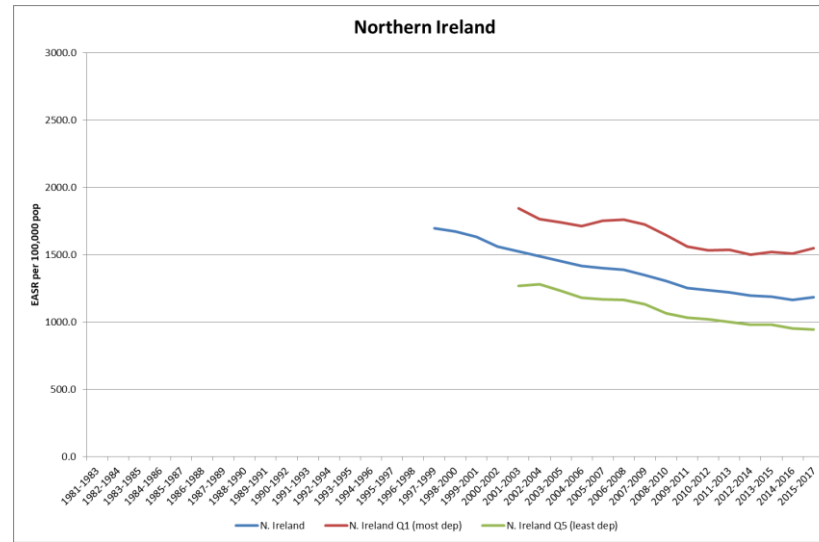
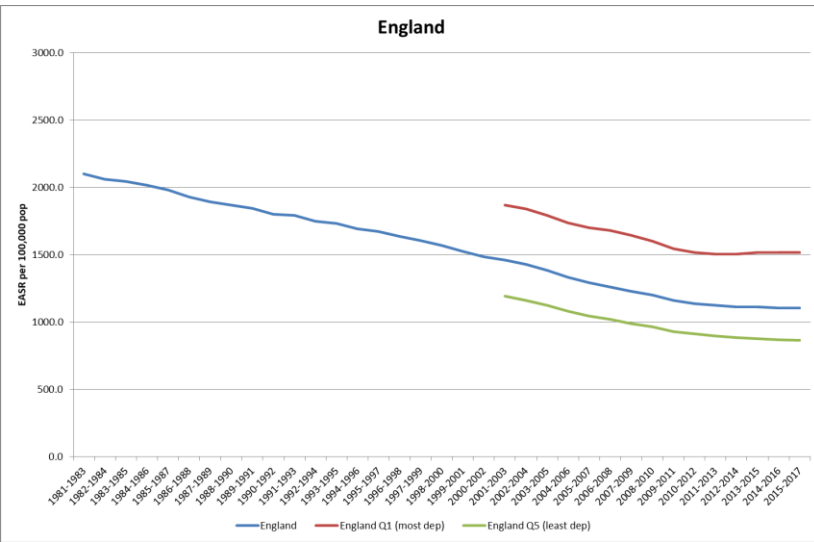
Northern Ireland: females, all ages, all cause: EASRs
Rolling three-year averages per 100,000 population



Males – countries & cities

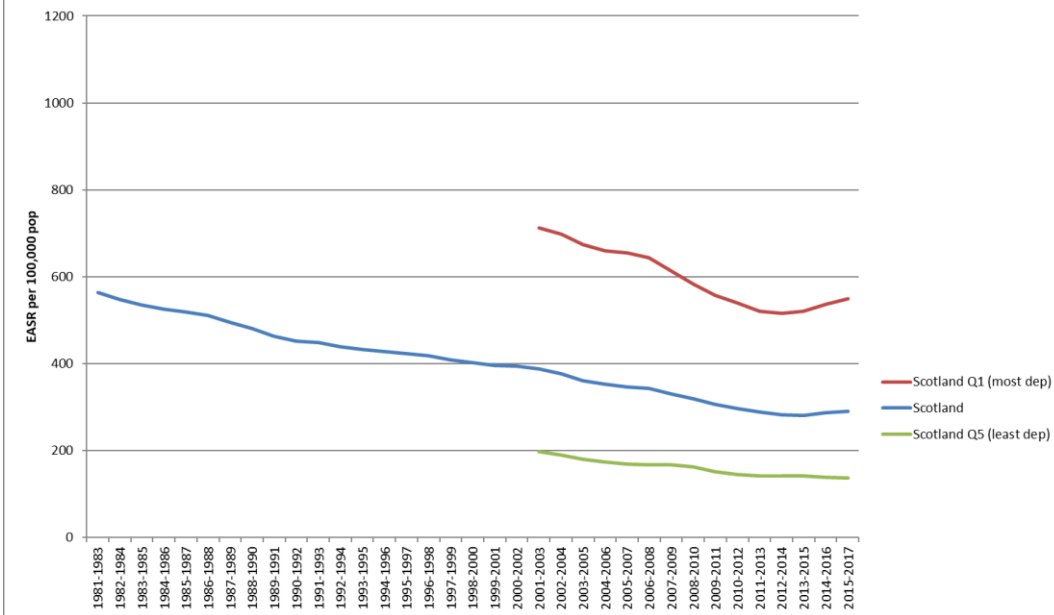


Males – countries & cities

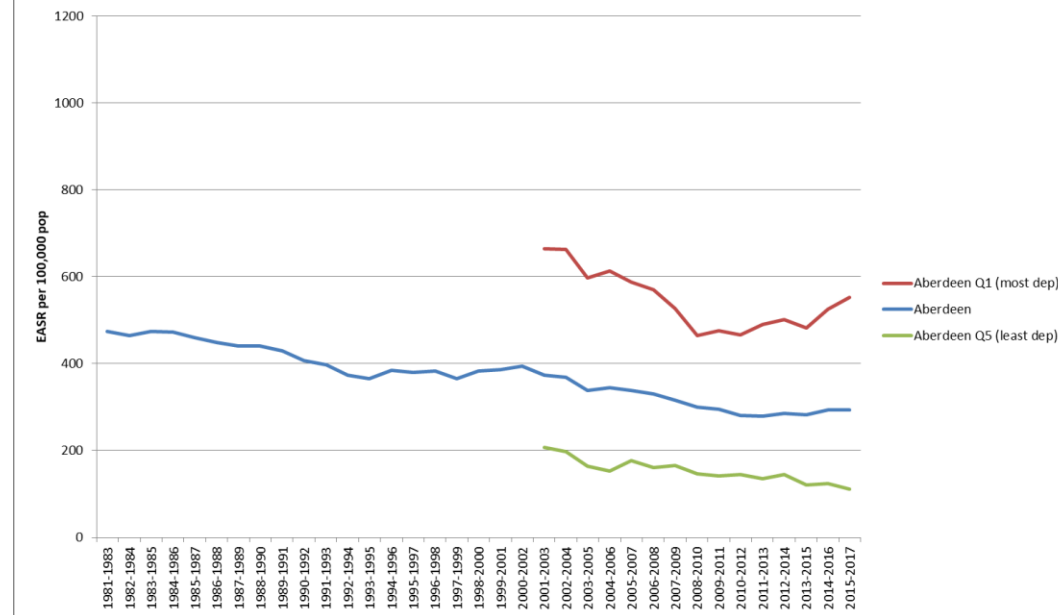


0-64 years

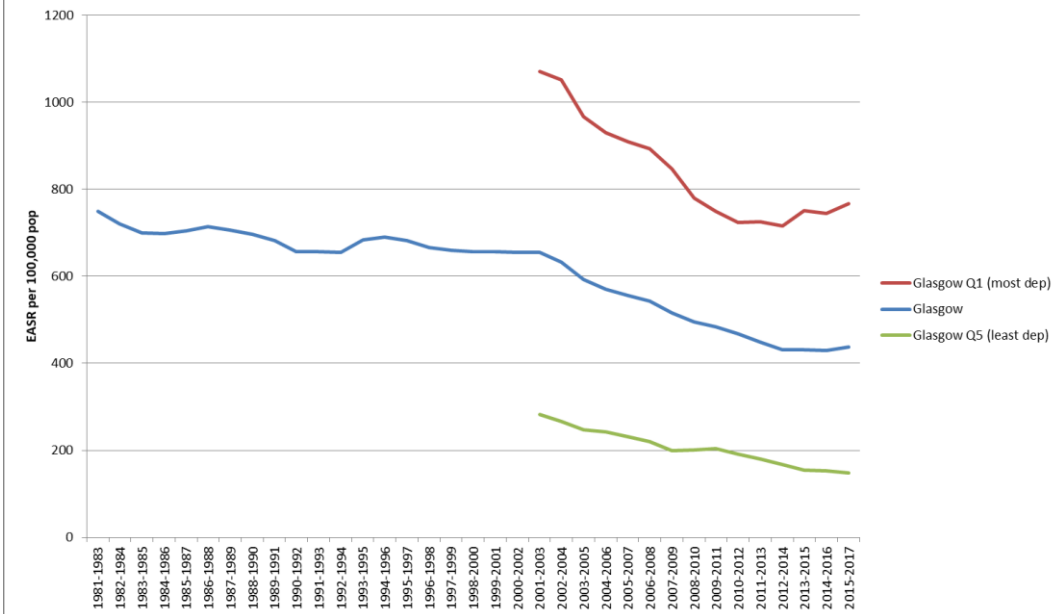
Males, 0-64 years, all cause: European age-standardised mortality rates
Rolling three-year averages per 100,000 population



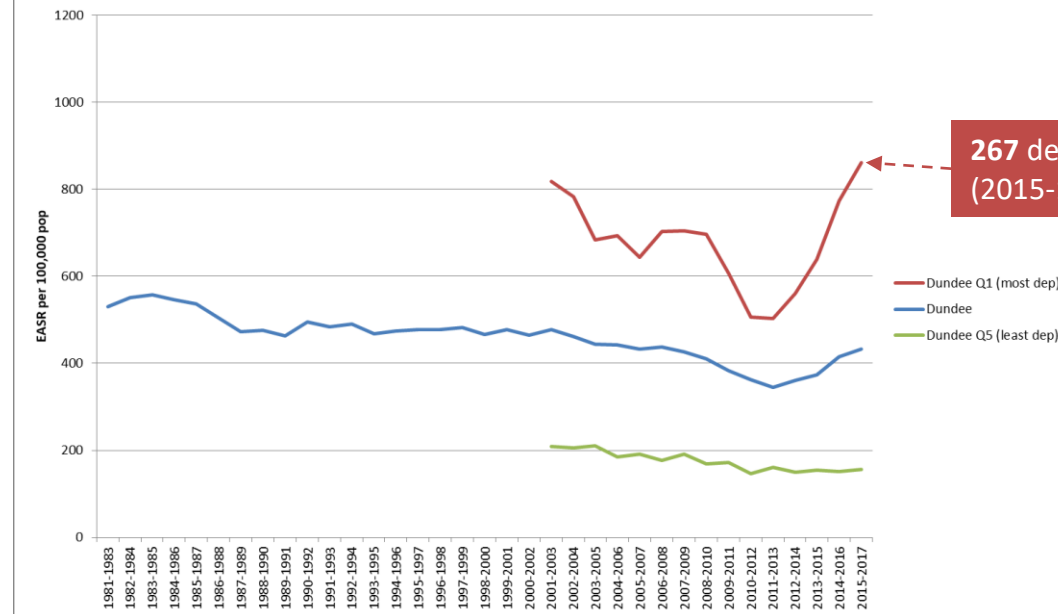
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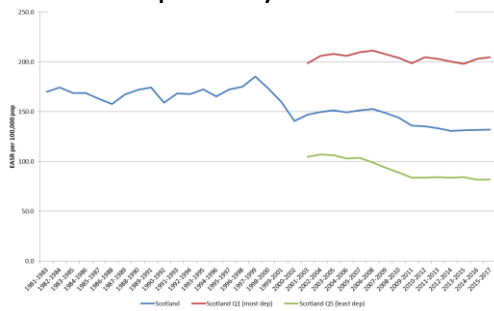


Results: 3 (of 4)

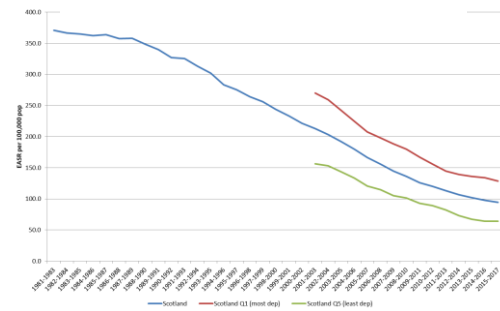
- These widening inequalities observed for the majority of the causes of death analysed

Cause-specific EASRs, all ages, females – by deprivation

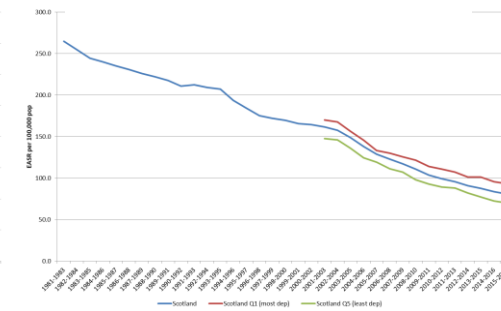
Respiratory disease



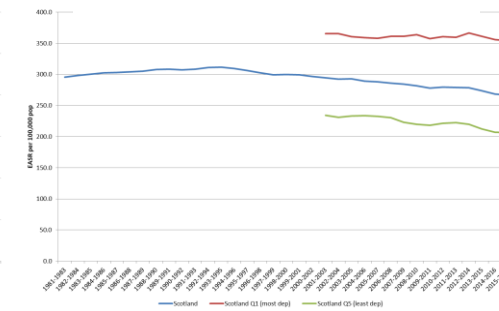
Ischaemic heart disease



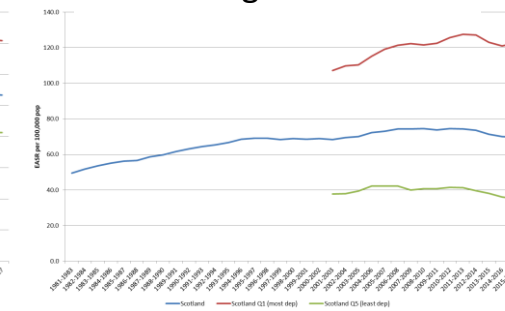
Cerebrovascular disease



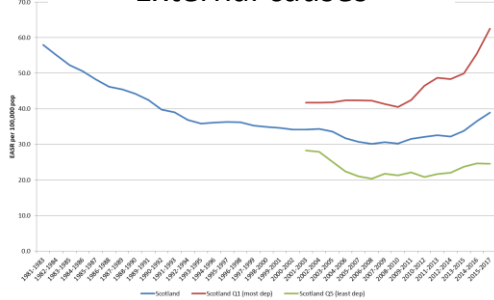
All cancers



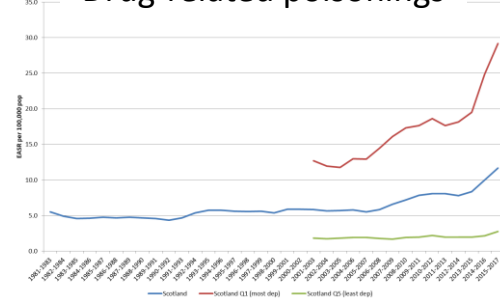
Lung cancer



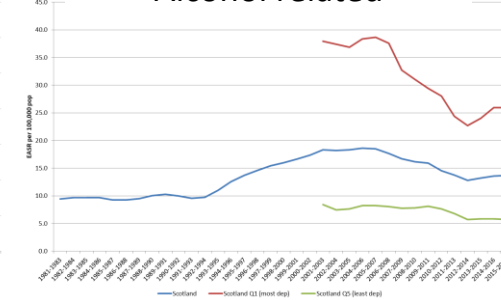
External causes



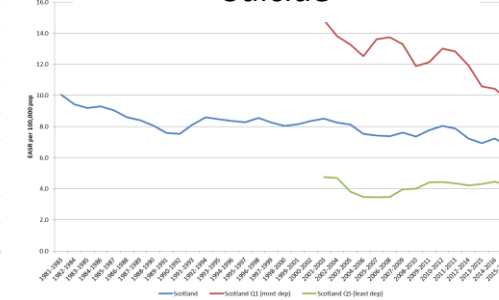
Drug-related poisonings



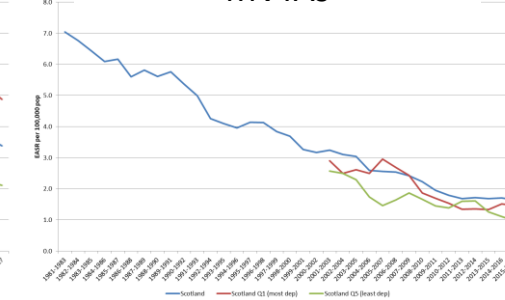
Alcohol related



Suicide



MVTAs

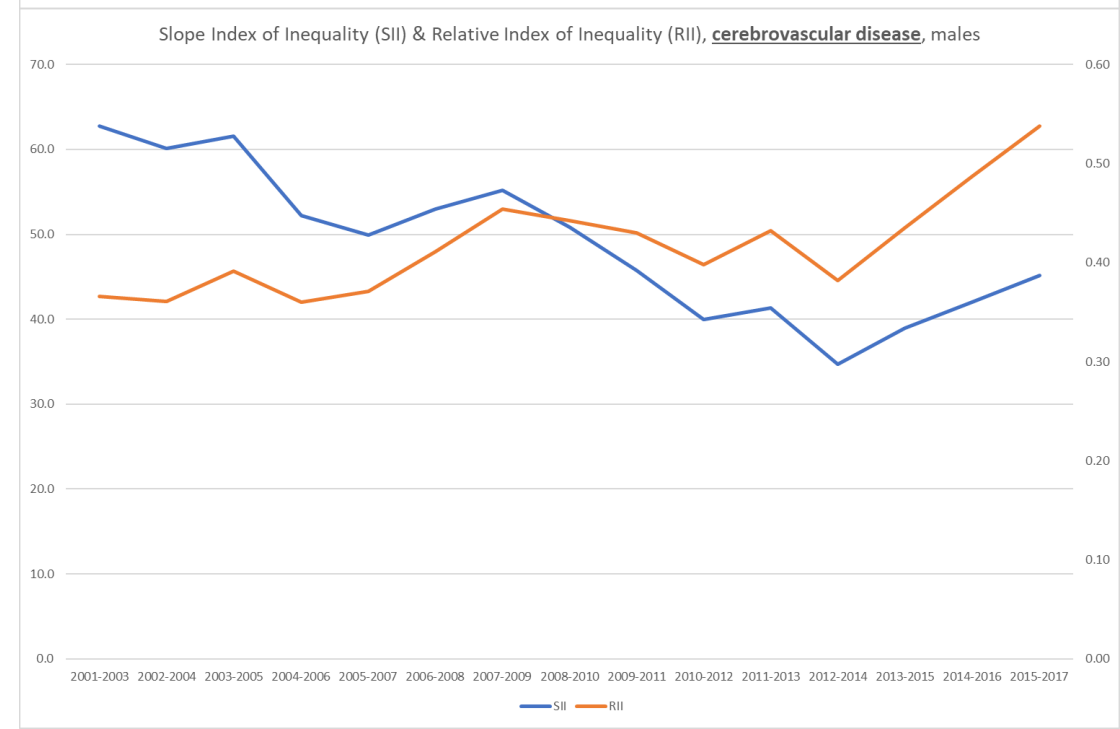
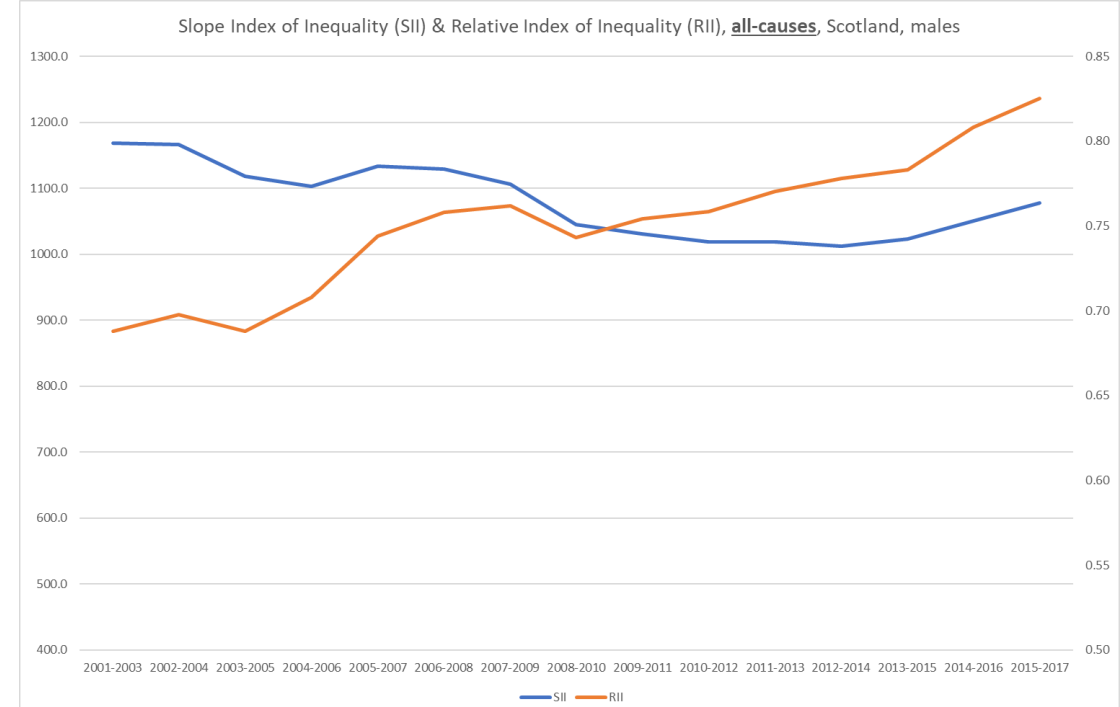


— Scotland — Scotland Quintile 1 (most deprived) — Scotland Quintile 5 (least deprived)

Widening inequalities

- Similar picture for males, with exception of cancer (esp. lung cancer)
- Gap quantified by calculation of SII and RII
- (only two examples for sake of sanity)

Widening inequalities

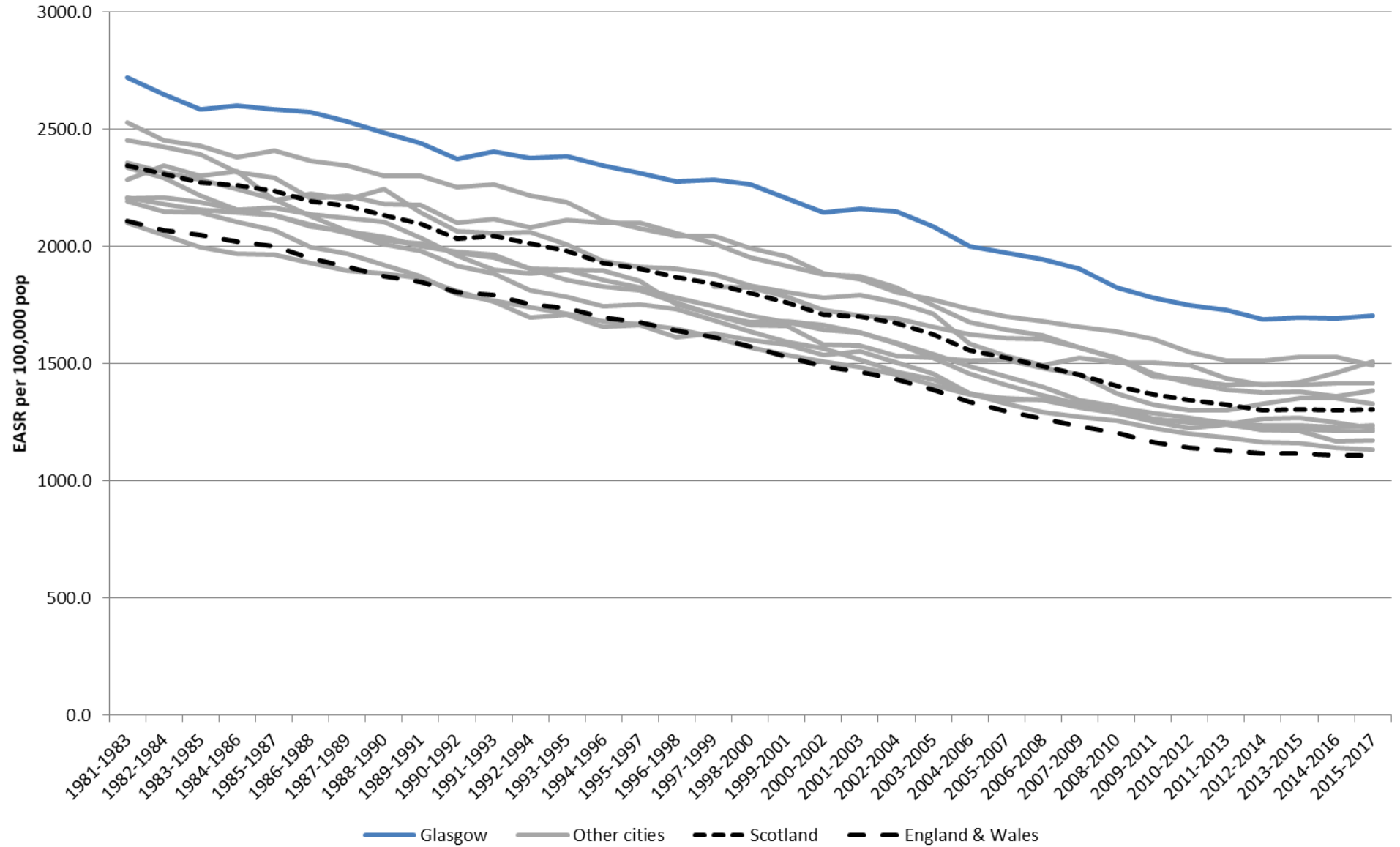


Results: 4 (of 4)

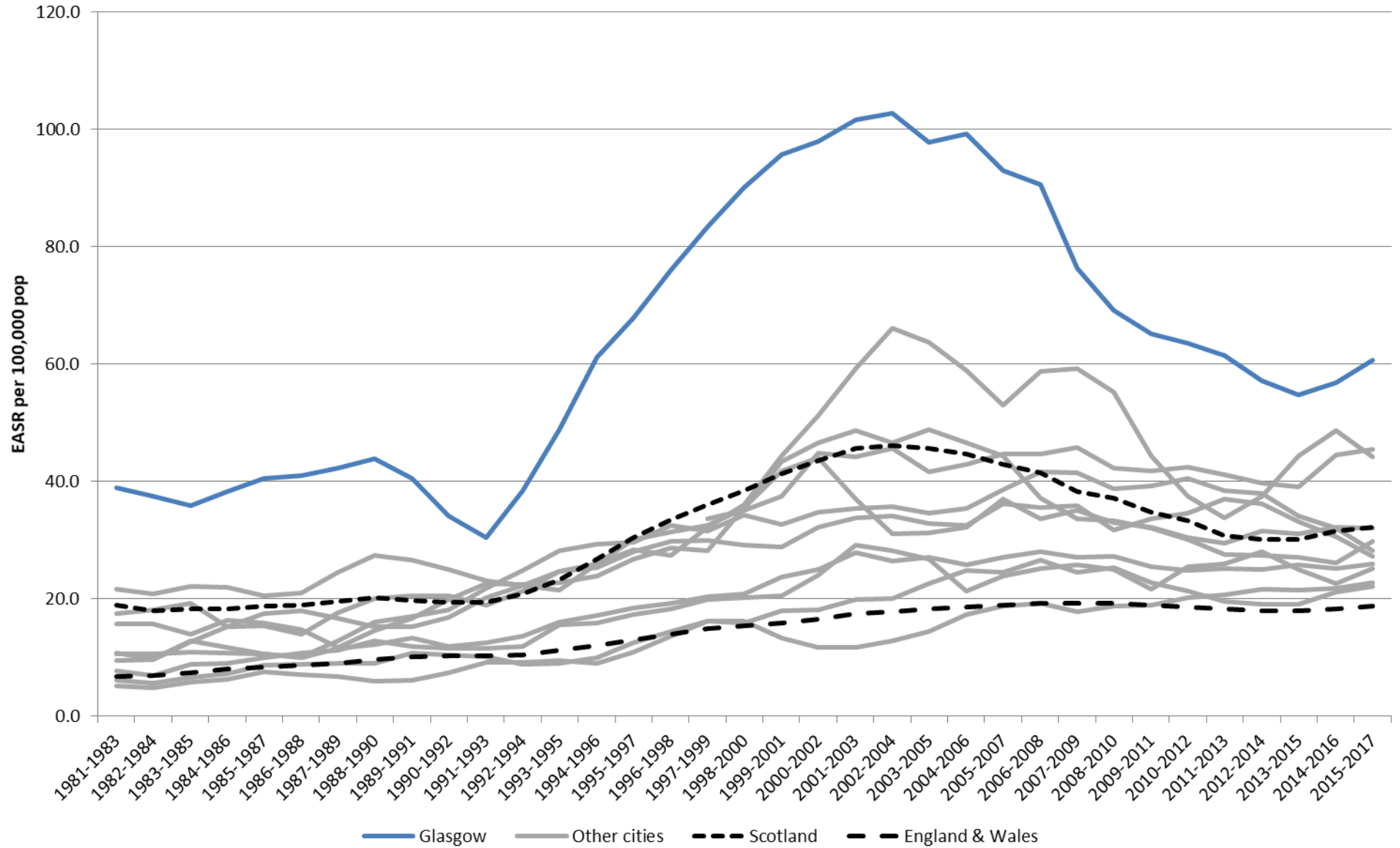
Various **city-level** issues to note:

1. Slow-down in mortality improvement (already shown)...
2. ...masking increasing deaths among poorest (ditto)
3. Glasgow (again) stands out among UK cities for most causes...

Males: all causes, all ages



Alcohol-related causes (males, all ages)

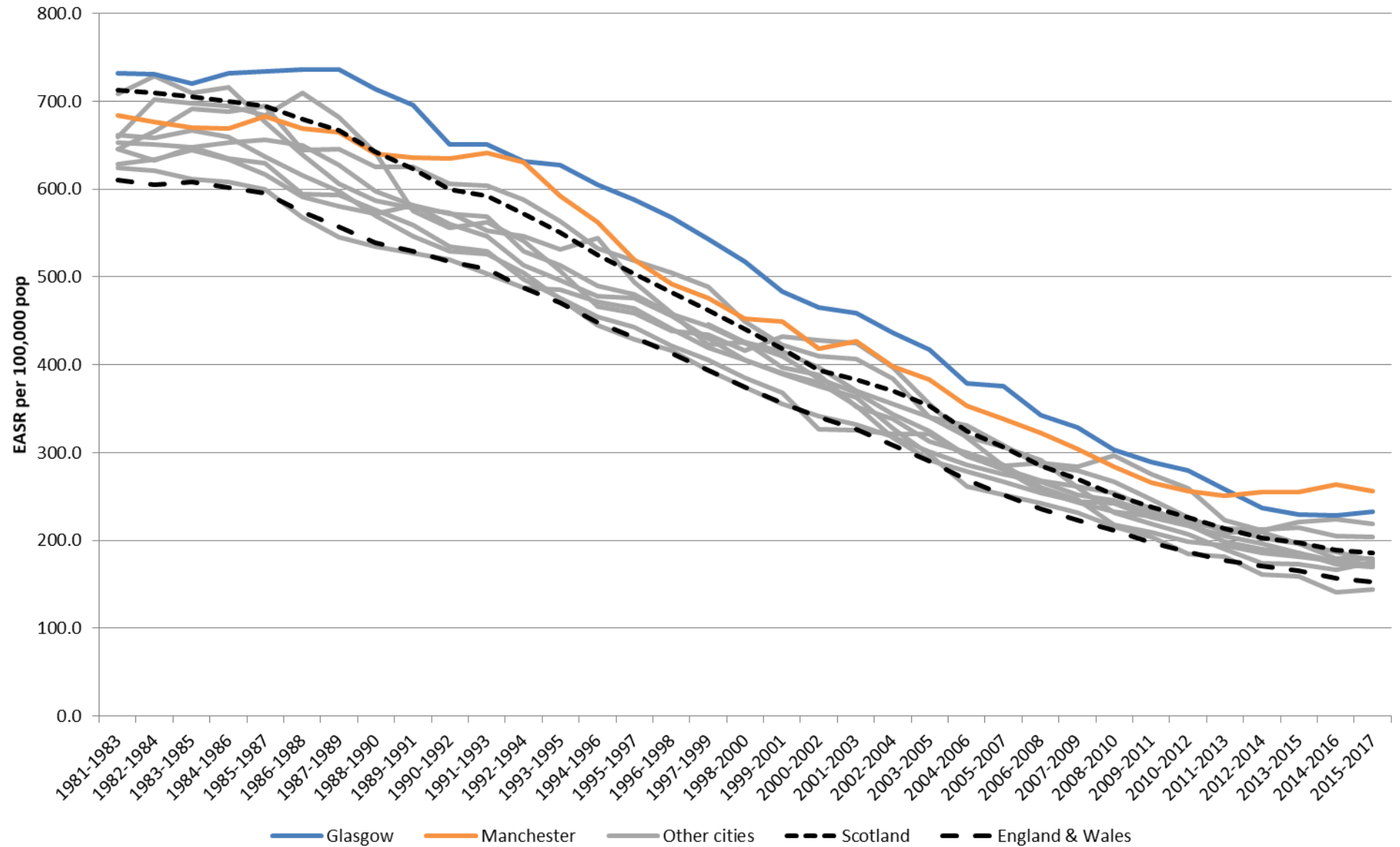


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1. Slow-down in mortality improvement (already shown)...
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4. ...but exceptions apply e.g.:
 - a) Manchester and IHD

Ischaemic heart disease (males, all ages)



Results: 4 (of 4)

Various **city-level** issues to note:

1. Slow-down in mortality improvement (already shown)...
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3. Glasgow (again) stands out among UK cities for most causes...
4. ...but exceptions apply e.g.:
 - a) Manchester and IHD
 - b) Dundee and drug-related poisonings...

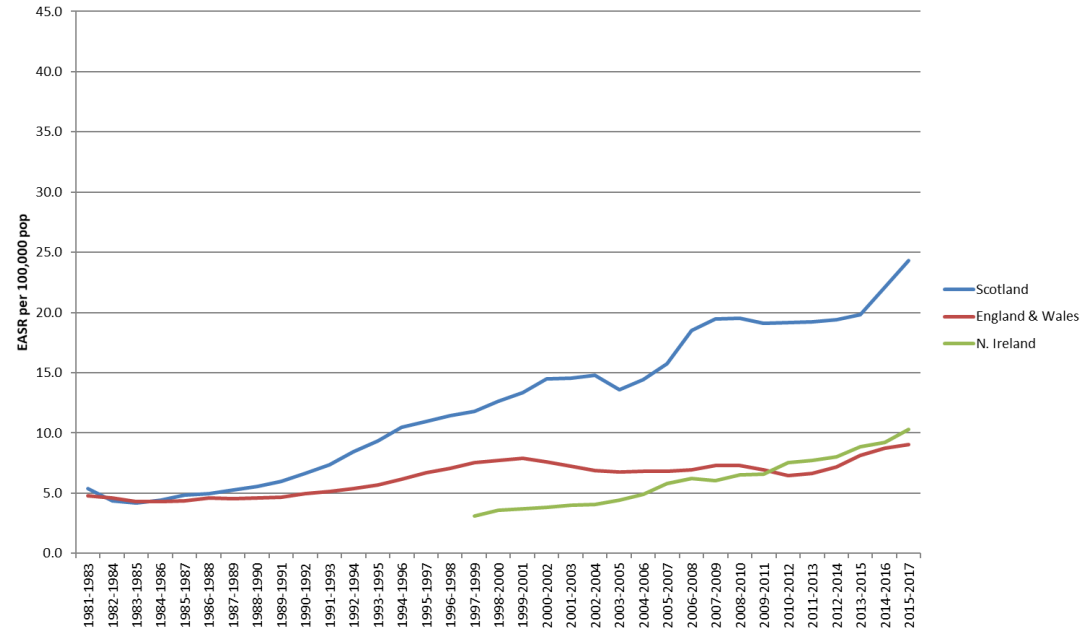
Drug-related poisonings

- Defined by ICD codes – broader/less accurate definition of drug related deaths
- Increases across *all* of the UK – but dramatically different in Scotland
- Obviously highly socially patterned
- Broadly similar trends/differences for all ages, and working-age groups, and males and females...

All ages

Males, all ages, drug-related poisonings: Europ'n age-stand'd mortality rates

Rolling three-year averages per 100,000 population

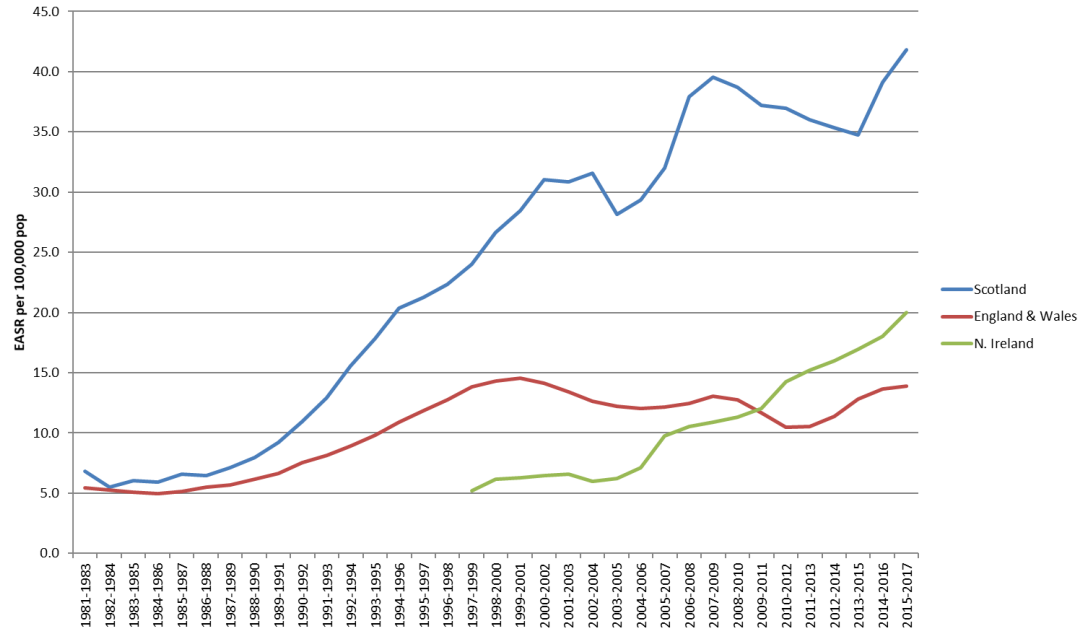


15-44 years

45-64 years

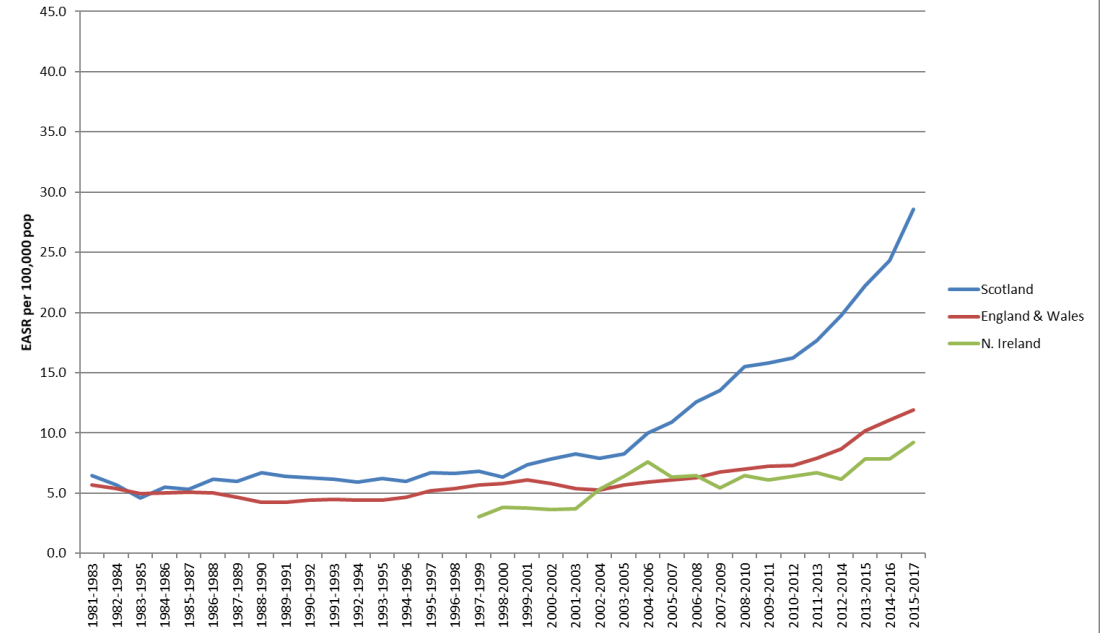
Males, 15-44 yrs, drug-related poisonings: Europ. age-stand. mortality rates

Rolling three-year averages per 100,000 population



Males, 45-64 yrs, drug-related poisonings: Europ. age-stand. mortality rates

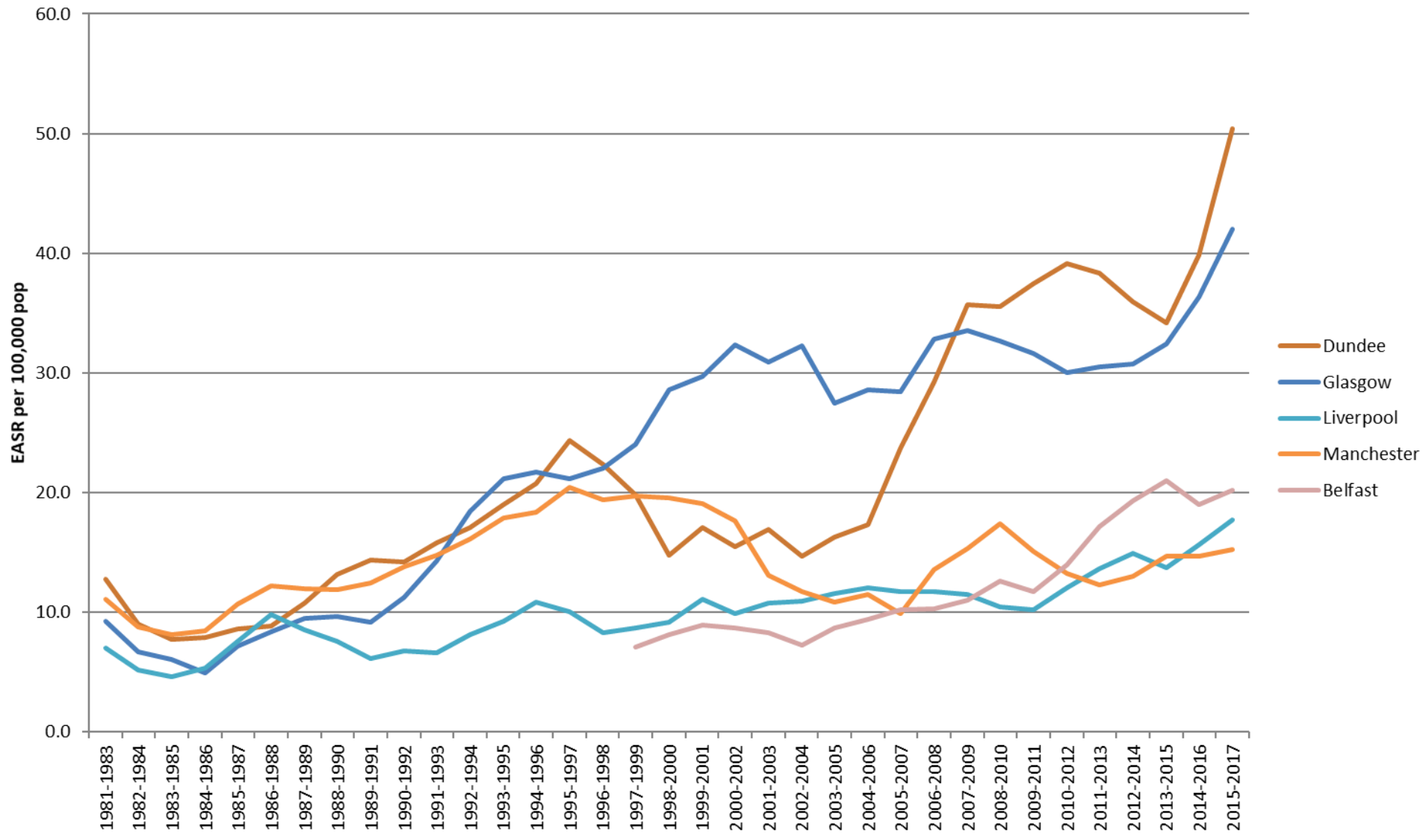
Rolling three-year averages per 100,000 population



Drug-related poisonings – all ages, cities

Males, all ages, drug-related poisonings: Europ'n age-stand'd mortality rates

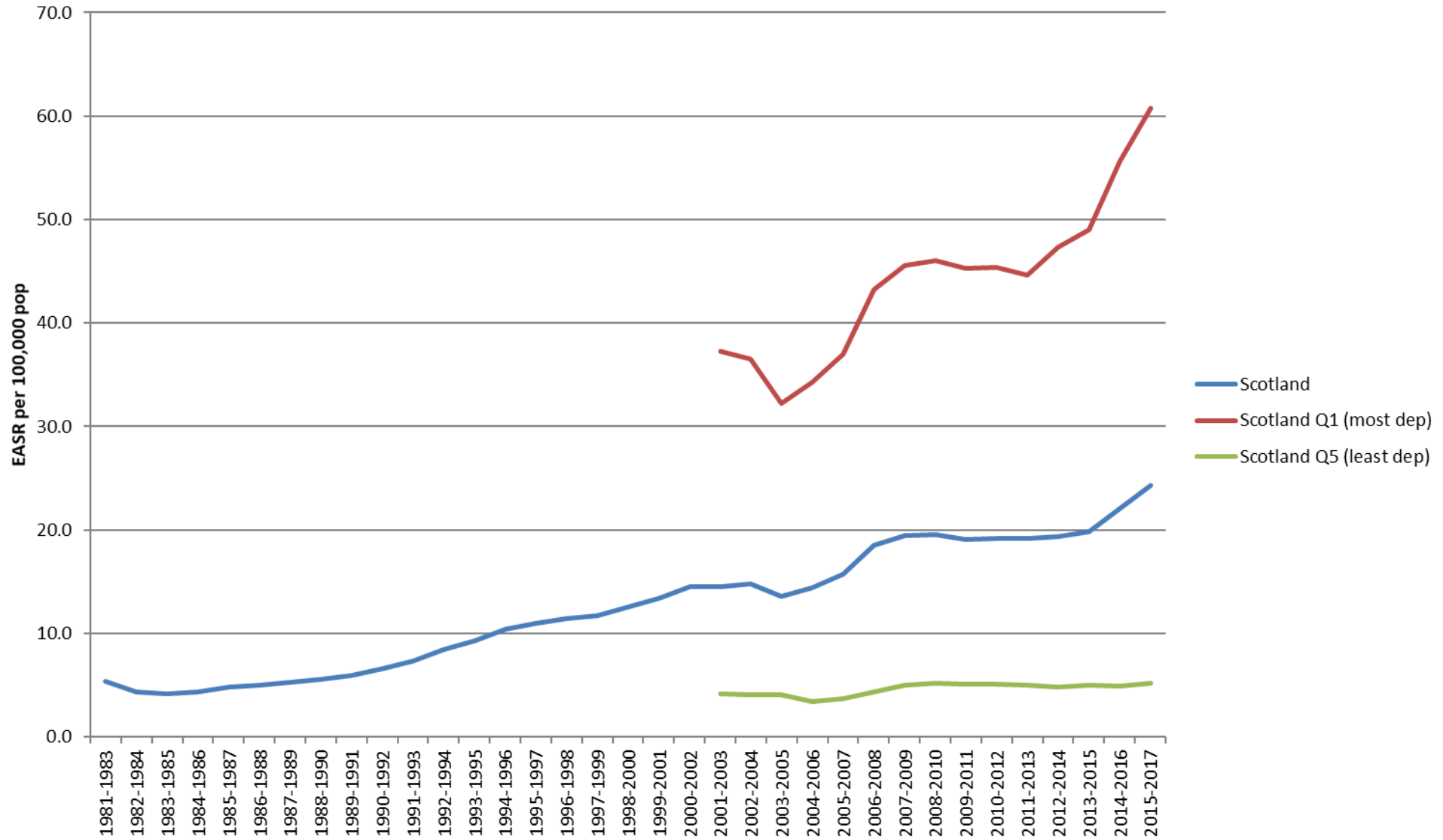
Rolling three-year averages per 100,000 population



Drug-related poisonings – all ages, by deprivation quintile

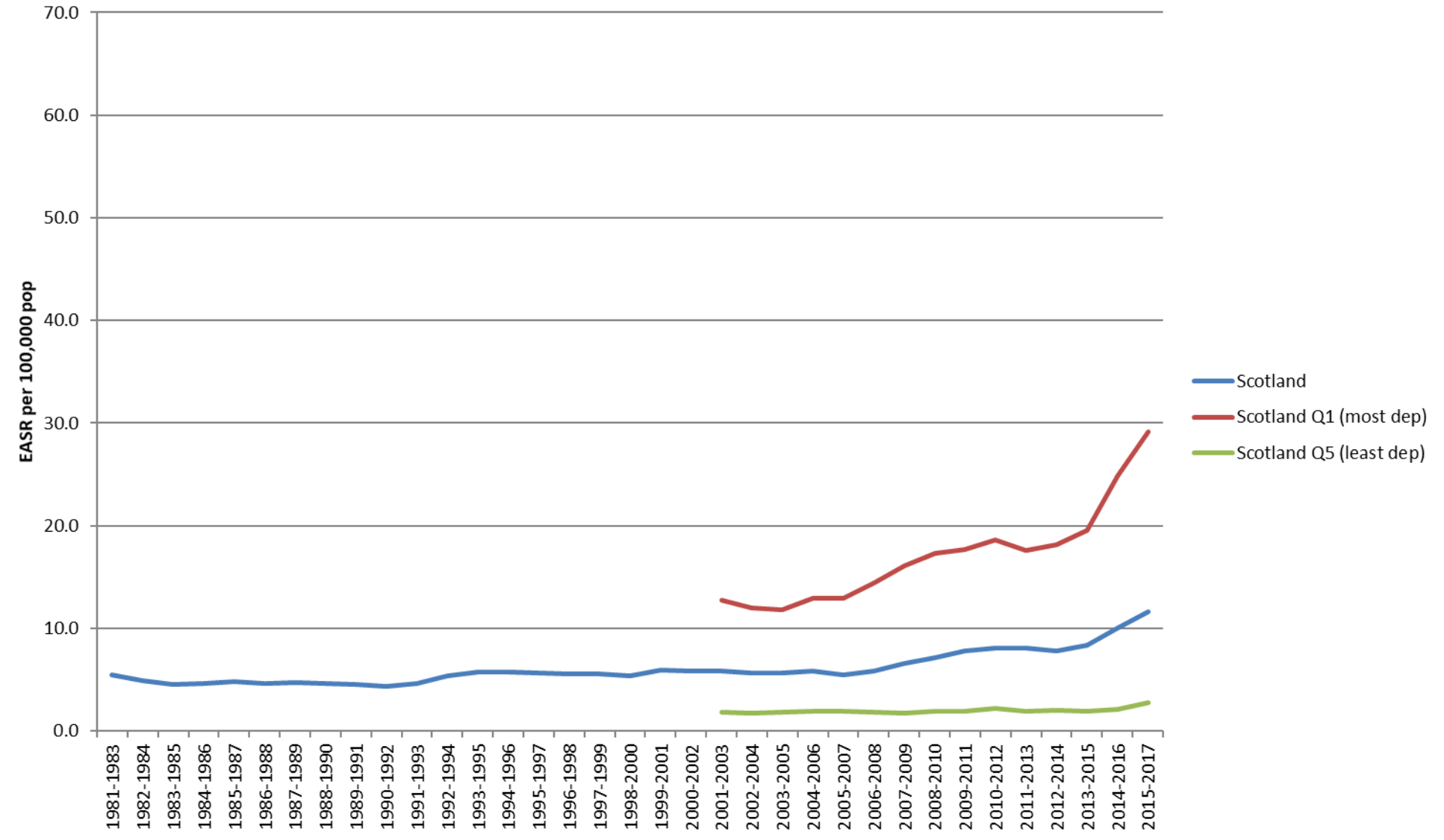
Males, all ages, drug-related poisonings: Europ'n age-stand'd mortality rates

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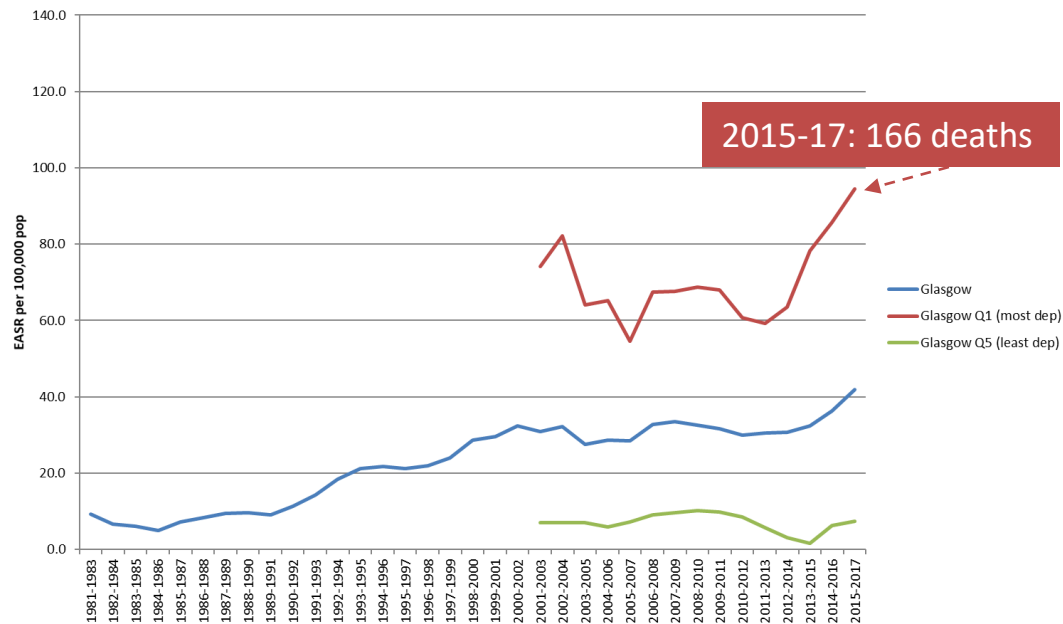
Females, all ages, drug-related poisonings: Europ. age-stand. mortality rates

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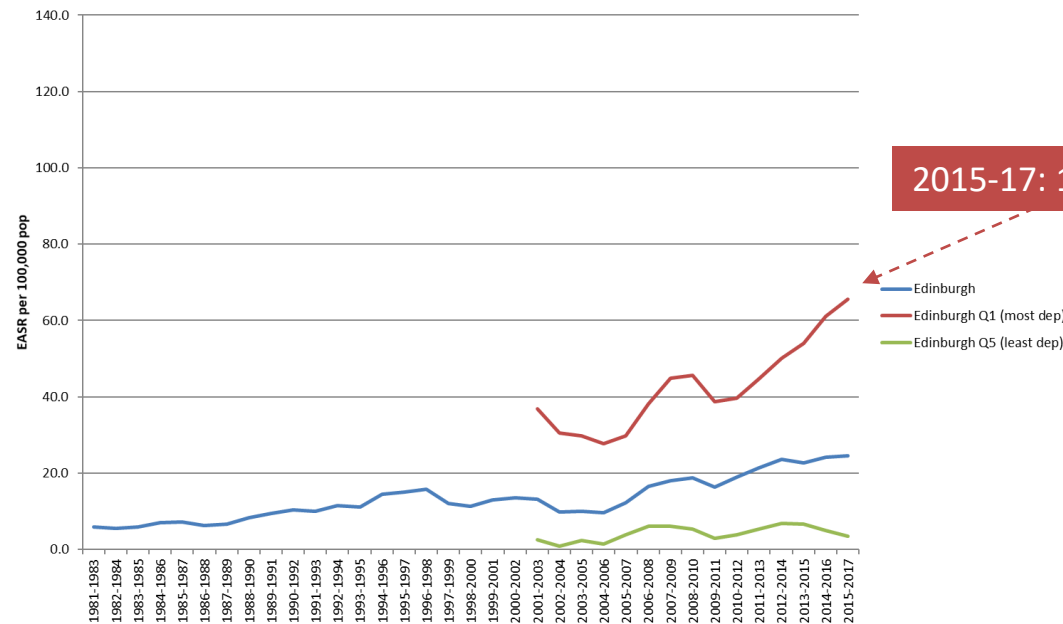
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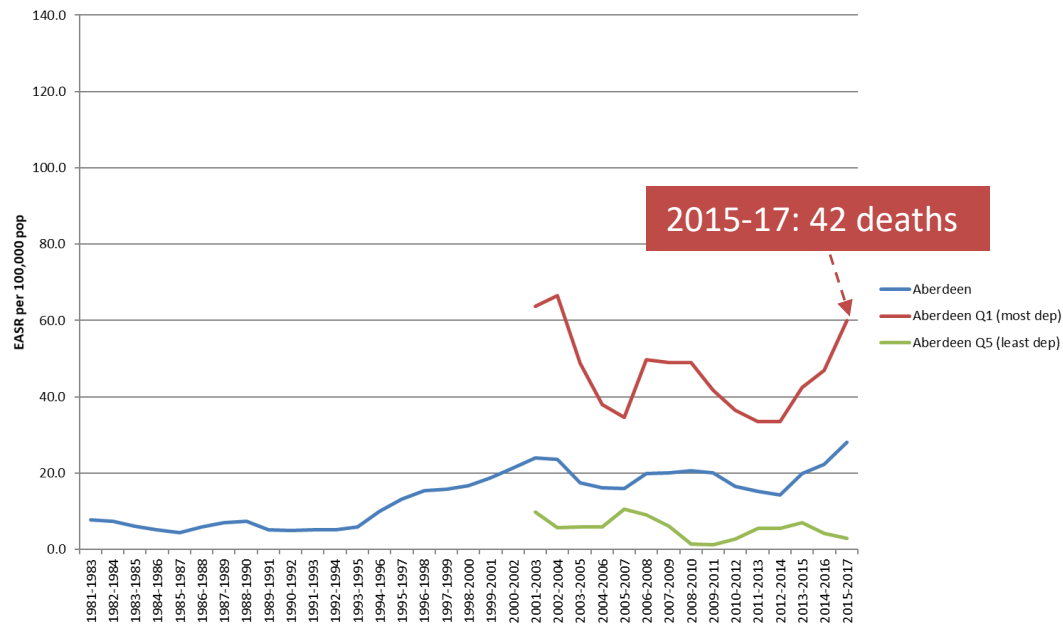
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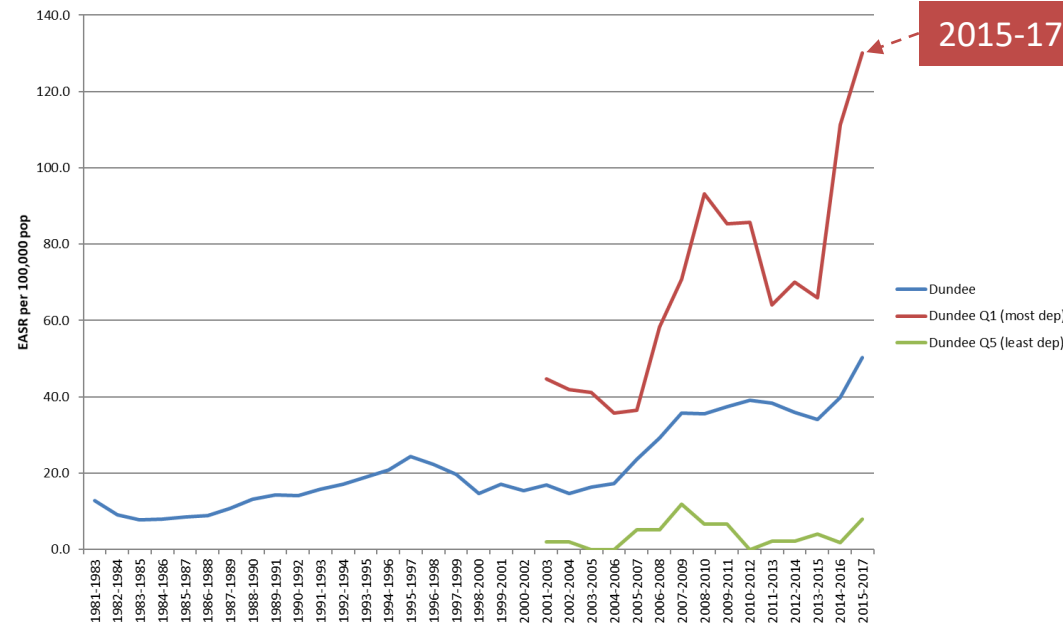
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Rolling three-year averages per 100,000 population



In summary...

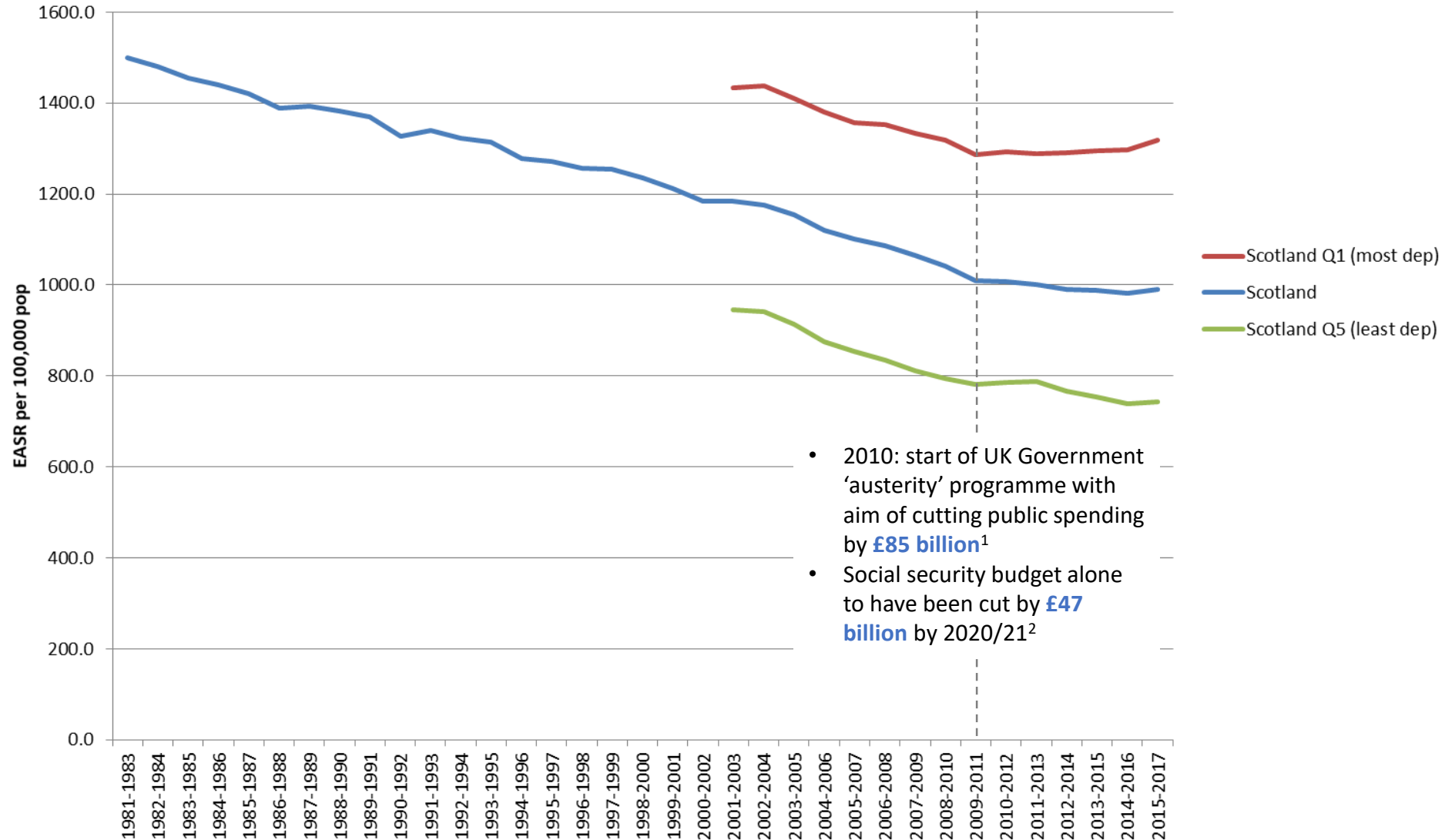
- UK-wide issues:
 - Slow-down in mortality rate improvement...
 - ..masking increased rates among more deprived
- Scotland-specific issues:
 - Impact of drugs harm..
 - ..worsening overall mortality among under 65s

Implications

- Drugs deaths - 'perfect storm' of:
 - Ageing, vulnerable, cohort (e.g. Parkinson et al 2018)
 - Increased affordability, accessibility and variety of drugs
 - Cuts to social security and relevant services
 - And more... (UK Parliament Scottish Affairs Committee 2019)
- Overall mortality trends:
 - Further evidence of likely impact of UK Government 'austerity' measures since 2010...

Females, all ages, all cause: European age-standardised mortality rates

Rolling three-year averages per 100,000 population



1. Office for Budget Responsibility 2013.

2. Scottish Government 2017 (quoting OBR figures)

“Poverty is a political choice”



Prof. Philip Alston, United Nations
Special Rapporteur on extreme poverty
and human rights, 2018

**Statement on Visit to the United Kingdom, by Professor Philip Alston, United Nations
Special Rapporteur on extreme poverty and human rights**

London, 16 November 2018

Introduction

The UK is the world's fifth largest economy capital is a leading centre of global finance, despite the current political turmoil, it has a of much of the world. It thus seems patently people are living in poverty. This is obvious growth in foodbanks and the queues waiting streets, the growth of homelessness, the semi appoint a Minister for suicide prevention an of loneliness and isolation. And local autho roles in providing a real social safety net ha Libraries have closed in record numbers, co underfunded, public spaces and buildings in off. While the labour and housing markets j is on the contribution made by social securit

The results? 14 million people, a fifth of the more than 50% below the poverty line,¹ and essentials.² The widely respected Institute fo between 2015 and 2022, and various source almost one in every two children to be poor but a social calamity and an economic disas

But the full picture of low-income well-beir Its manifestations are clear for all to see. Th leading think tanks, its parliamentary comm Audit Office, and many others, have all drav the least well off in this country. But thro situation for what it is. The Government ha while devolved authorities in Scotland and to 'mitigate', or in other words counteract, a benefits policy. Ministers insisted to me tha tweaks to basic policy have reluctantly been change in response to the many problems w attention. The good news is that many of th

¹ Social Metrics Commission, "A new measure of po <https://socialmetricscommission.org.uk/MEASURIN>

² Suzanne Fitzpatrick, Glen Bramley, et al., "Destitut <https://www.jrf.org.uk/report/destitutionuk-2018> pp.

³ Institute for Fiscal Studies, "Living standards, pov 2, 2017 ifs.org.uk/publications/10028.

United Nations A/HRC/41/39/Add.1

 **General Assembly** Dist.: General
23 April 2019
Original: English

Human Rights Council
Forty-first session
24 June–12 July 2019
Agenda item 3
Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development

Visit to the United Kingdom of Great Britain and Northern Ireland

Report of the Special Rapporteur on extreme poverty and human rights*

Summary

The Special Rapporteur on extreme poverty and human rights, Philip Alston, undertook a mission to the United Kingdom of Great Britain and Northern Ireland from 5 to 16 November 2018.

Although the United Kingdom is the world's fifth largest economy, one fifth of its population (14 million people) live in poverty, and 1.5 million of them experienced destitution in 2017. Policies of austerity introduced in 2010 continue largely unabated, despite the tragic social consequences. Close to 40 per cent of children are predicted to be living in poverty by 2021. Food banks have proliferated; homelessness and rough sleeping have increased greatly; tens of thousands of poor families must live in accommodation far from their schools, jobs and community networks; life expectancy is falling for certain groups; and the legal aid system has been decimated.

The social safety net has been badly damaged by drastic cuts to local authorities' budgets, which have eliminated many social services, reduced policing services, closed libraries in record numbers, shrunk community and youth centres and sold off public spaces and buildings. The bottom line is that much of the glue that has held British society together since the Second World War has been deliberately removed and replaced with a harsh and uncaring ethos. A booming economy, high employment and a budget surplus have not reversed austerity, a policy pursued more as an ideological than an economic agenda.

* The summary of the report is being circulated in all official languages. The report itself, which is annexed to the summary, is being circulated in English only.

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Implications

- Drugs deaths - 'perfect storm' of:
 - Ageing, vulnerable, cohort (e.g. Parkinson et al 2018)
 - Increased affordability, accessibility and variety of drugs
 - Cuts to social security and relevant services
 - And more... (UK Parliament Scottish Affairs Committee 2019)
- Overall mortality trends:
 - Further evidence of likely impact of UK Government 'austerity' measures since 2010...
- We should have been shouting about this before the pandemic.
- We should still be shouting about it now.

Further details

- Walsh D., McCartney G., Minton J., Parkinson J., Shipton D., Whyte B. Changing mortality trends in UK countries and cities: a population based trend analysis. *Submitted to: BMJ Open 2020*
- Email me: david.walsh.2@glasgow.ac.uk

The crisis before the crisis: pre-pandemic mortality trends in UK cities and countries

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